N. A. Wood

THE CONDOR

A Magazine of Western Ornithology

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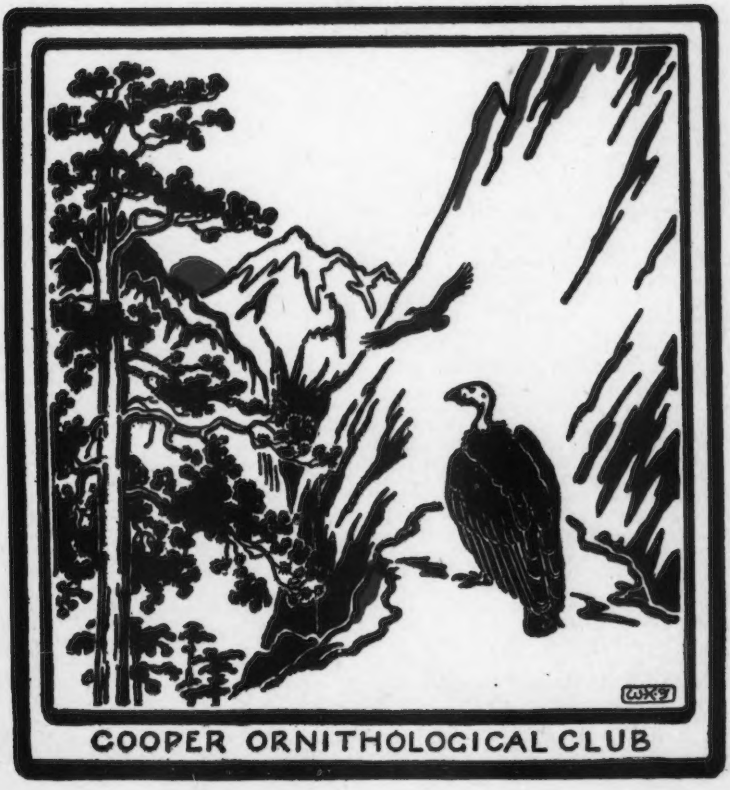

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THE CONDOR

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VOLUME XXX | MARCH-APRIL, 1928 | NUMBER 2

WHAT COLOR IS THE EYE OF A BUSH-TIT?

WITH ONE SET OF SIX ILLUSTRATIONS

By HAROLD MICHENER AND JOSEPHINE R. MICHENER

BIRD BANDING offers an excellent opportunity for close observation of many individual birds. The following is offered as one bit of information which has come to us as incidental to our bird banding work. The fact, which was new to us, is that some Bush-tits (*Psaltriparus minimus*) have light, almost white, eyes and others of the same flock have dark brown, almost black eyes. The pupil of the eye in both cases is, of course, black.

On October 23, 1926, we caught our first two Bush-tits, both in the same trap at the same time. The first one to be banded had light eyes. That did not excite any particular curiosity on our part because they are such tiny, fidgety things in the bush that it would not be strange if the color of the eyes were overlooked. So that one was banded and released before the other was taken in hand. This second one had dark brown eyes. Then we were puzzled. Which one was a Bush-tit? We were sure when each was in hand that it was a Bush-tit, but had we observed the first one carefully enough? Neither the books at hand nor inquiries gave us help. We waited.

On July 4, 1927, we caught three, all having light eyes, and on July 10 we began the day with seven together in one two-compartment Potter trap which was elevated on a stand pipe so that water dripped into a shallow vessel in the trap. We were careful to hold these birds until they could all be examined and photographed. Four had light eyes and three dark brown. The plumage of all those with light eyes showed no wear even when examined, on the bird, with a small hand lens. That of one brown-eyed bird showed distinct wear. On the second we could not see wear and the third escaped before we could make a careful examination of the feathers.

Figure 51 shows three of the light-eyed birds in the left hand column and two with dark eyes in the right hand column, the top and middle pictures of this column being two views of the same bird.

On July 15 one of the light-eyed birds banded on the 10th and a new brown-eyed one were trapped. On July 18 two were caught, one having dark brown eyes and rump feathers that showed wear under the microscope and the other having light brown eyes which were distinctly different from the whitish eyes of some of those previously captured. The rump feathers taken from the latter were lost before being examined under the microscope.

On July 27 seven were again caught in one trap at the same time. Two of these were repeats from July 4 and 10, respectively, and their eyes appeared as previously with the possible exception that those of the one banded on July 4 had become more yellow. They were recorded as "light" on July 4 and as "yellowish" on July 27, this latter term being used on that day to differentiate them from the ordinary light ones

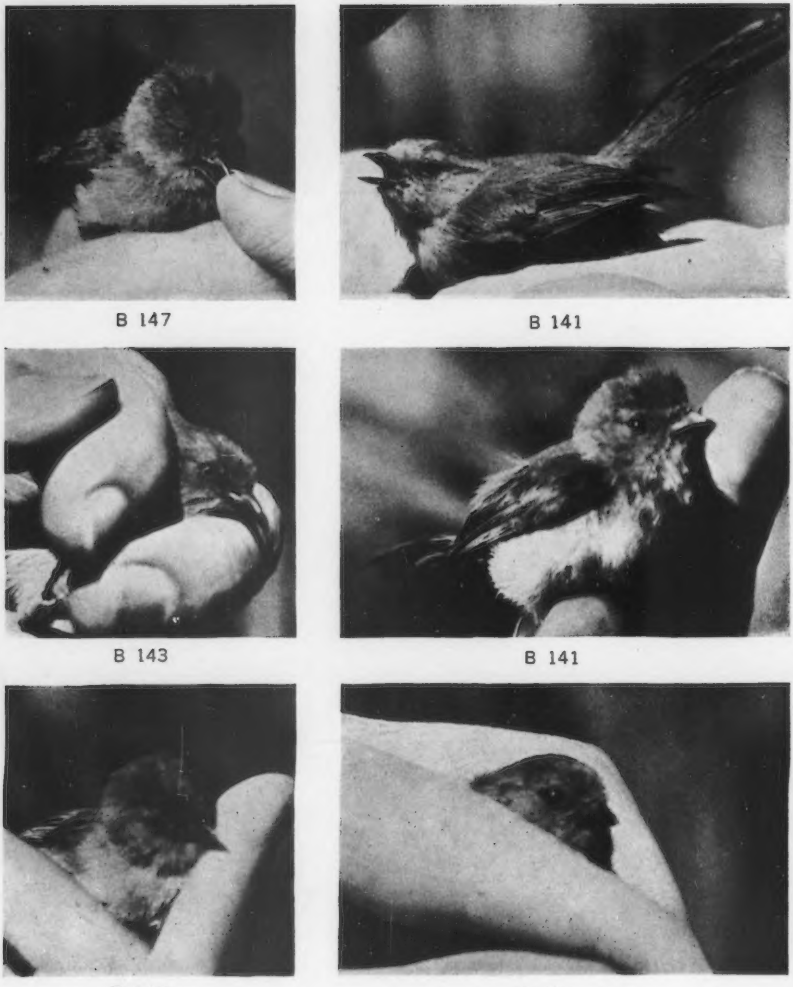

Fig. 51. BUSH-TITS: THOSE ON RIGHT WITH DARK EYES; THOSE ON LEFT WITH LIGHT EYES. BAND NUMBERS SHOWN UNDER EACH PICTURE.

which were almost white. Of the five new ones two had dark brown eyes, one light and one yellowish. All seven were in various degrees of molt. Of the one having light eyes our notes say: "Only five tail feathers; new ones coming in; some feathers worn."

On July 29 another was caught having light brown eyes. It was molting. On August 17 one with dark brown eyes was caught. It was molting. In the tail the two extreme feathers on the right and the one extreme feather on the left were old, all the rest being new.

A summation of these records shows nine with light eyes, two with yellowish eyes (one of these was first recorded as having light eyes and was counted in the nine), two with light brown eyes, and nine with dark brown eyes. With only one exception, those observed to have worn plumage also had dark eyes. The one light-eyed bird observed to have worn plumage was captured on July 27 when its feathers might easily have shown wear even though it were a bird of the year.

It may be that this difference of eye color is a sex difference but we are inclined to advance the theory that the birds of the year have light eyes and the adults have dark eyes, with intermediate stages of yellowish and light brown. However, we do not consider that our observations of the plumage are sufficient to prove this theory.

An extended search of bird literature has yielded only three references to the color of the Bush-tit's eyes. Dawson in "Birds of California", under both the Coast Bush-tit and the Lead-colored Bush-tit, says of the "adult in fresh fall plumage", "iris light yellow". Florence A. Merriam in "A-Birding on a Bronco" says of one of them, ". . . a comical look of surprise came into his yellow eyes . . . ." Hoffmann in "Birds of the Pacific States", in describing the Wren-tit, makes a distinction between it and the Bush-tit by saying, after speaking of the "glaring white eye" of the former, "The Bush-tit . . . has a black eye . . . ."

In addition to the above references to published works, Mr. Law's notes on a Lead-colored Bush-tit collected in Arizona read, "iris dark at death". This appeared to be an immature bird because of the lack of development of its sex organs.

If someone knows which Bush-tits have light eyes and which dark, many bird students will welcome the information.

Note.—When the above was submitted to THE CONDOR, Dr. Grinnell called our attention to "Animal Life in the Yosemite" (page 580), where Grinnell and Storer say: "Certain individual Bush-tits have the iris of the eye white though in the majority of the birds it is dark-colored. This is a peculiarity which does not seem to be correlated with age, sex, or season." This statement was based on a considerable series of birds in which age was determined by character of the skull.

Pasadena, California, September 23, 1927.

BLACK SWIFTS NESTING BEHIND A WATERFALL

WITH ONE ILLUSTRATION

By EMILY SMITH

FINDING nests of Black Swifts (*Cypseloides niger borealis*) behind a waterfall in a not very remote canyon of the Santa Cruz Mountains last summer was an exciting surprise. Many visitors to Berry Creek Falls have told of seeing the dark, long-winged birds dart in through the falling water, but I had not dreamed there were nests there.

The nest I first saw, however, was not behind the falls, but a little to one side in a niche twenty feet above the pool which lies at the base of the sheer seventy-foot cliff. It was disclosed by the bird flying to it to feed its sitting mate. Although there were fifty persons moving about in full view and within seventy feet of the nest, it had flown straight to a point just below the niche, and flat against the wall had fluttered up to the nest. The feeding was quickly done, and the bird was soon streaking down the canyon. That was July 16. Three days later I returned to look more carefully at the nest. I could not get closer than the edge of the pool, but from there the nest thirty feet away was in plain view, a thick, round mat of moss and possibly some mud, set in an almost square little niche in the rock wall. The wall roundabout, covered with mosses, five-finger ferns, and other moisture-loving plants, was dripping wet. The early morning sunlight, slanting in on the nest, showed the outer side to be hoary with fine drops of water. For an hour the sunlight, coming through the redwoods, passed on and off the bird sitting on its damp nest.

July 27 Mr. A. G. Vrooman of Santa Cruz accompanied me to the nesting site and assured me that I had not made a mistake. The egg had hatched, and there was a surprisingly large, downy gray bird sleeping on its mat of moss. While we watched, a swift sped over our heads and in through the falls fifty feet above the pool. Dimly through the falling water we could see it flutter its wings and then disappear into a niche. Mr. Vrooman suggested the possibility of a nest there behind the falls, but we could see nothing.

Three weeks later (August 16) in the middle of the afternoon I again saw a swift go in behind the falls in the same place, and soon afterwards, another dive in much lower down. Twenty minutes later a third swift appeared, and twittering, joined the second bird. Then, after reaching a better vantage point for observing, I saw, indistinctly, three birds and a nest behind the falls, only eight feet above the pool. Two heads were bobbing together, a young bird being fed by one of its parents, presumably the father, while the other parent looked on. The feeding was accompanied by a clicking sound, which I only faintly heard in the noise of the falls. After the father had left, the mother crept up onto the nest, and humping herself over the young bird hovered it, one long wing drooping over the side of the nest. She was still hovering it when I left at six o'clock.

The next morning when the early sunlight penetrated the falls (the falls face the southeast) I could see plainly the nest, hardly more than ten inches back from the main stream of the falling water. Some of the moss of which the nest was constructed appeared green and living, giving the nest a cushiony look. The young bird was snuggled down in it, and suggested a fat little mouse until it stretched a wing showing short quills. The sunlight also revealed a nest where Mr. Vrooman had

suggested there might be one. The young bird in the third nest was preening itself in the filtered sunlight, and appeared, with its long, white-tipped wing quills, to be

Fig. 52. BERRY CREEK FALLS, REDWOOD PARK, SANTA CRUZ MOUNTAINS, CALIFORNIA. THREE NESTING SITES OF THE BLACK SWIFT WERE, IN THE SUMMER OF 1927, LOCATED AS INDICATED BY THE ARROWS.
© F. R. Fulmer, 1926

as old as the first young bird, now more than three weeks old. Although there were droppings in several places on the cliff, I could not find any more nests.

During my visits with the Black Swifts I noted down everything I observed, but it did not take a large note-book to hold all my observations. As was Mr.

Michael's experience while observing nesting Black Swifts in Tenaya Canyon, there were long hours when nothing happened. My observations concerning the appearance and behaviour of the young birds correspond so perfectly with those recorded by Mr. Michael in his article in the CONDOR for March, 1927 (XXIX, p. 89) that it would be only repetition to record them here.

Mr. Michael's conclusion that "the young birds can, and do, go long hours without food" was corroborated by observation of the young birds at Berry Creek Falls. On each visit my chief interest was in finding out how often and when the young birds were fed. Unfortunately, I was not able to spend a whole day with the swifts until August 25, and then the youngest bird was more than two weeks old. I had not seen Primus (so named because he was first discovered) fed during my four previous visits with him. I had, however, seen Secundus fed at about four o'clock in the afternoon, and again the next morning at half past nine. I suppose being a very young bird he was fed more than once on each of those two days. But August 25 they all were fed only at nightfall. That day my sister and I managed to cover the four and one half miles from camp to the falls before a quarter past five o'clock in the morning. As we approached we heard soft, low cheeping notes, and then in the dim light saw birds circling and darting about in the small amphitheatre in front of the falls. It was impossible for the eye to follow them or count them, they flew so swiftly and the light was so faint. One could be seen chasing another, and then we could see several fluttering up the cliff and disappearing behind a log, and almost immediately half a dozen swept by us. By half past five, before it was light enough to see clearly, every bird had left. From then until sunset not one of the swifts returned.

Just before sunset Primus backed out of his nest, and clinging to the threshold of the niche, exercised his long wings. Seven times he vibrated them, with short intervals of rest during which his wonderful wings were stretched wide against the rock. Suddenly a swift, surprisingly light gray in color, "plastered" itself against the wall below Primus, and motionless watched us for fifteen minutes. Primus, seeing no reason for concern about us, scrambled back onto the nest and waited patiently for his meal. Finally the old bird fluttered up and for two minutes in the fading light we could see it feeding the young one by regurgitation. Then the other parent arrived, darker and seemingly larger, and immediately we guessed it was the mother. She fed the young bird for four minutes with only very short pauses, while the father looked on. By this time more swifts had arrived, but it was impossible to see what was going on in the nests behind the falls. Soon swifts were rapidly circling and darting about in the dim twilight. We saw Primus' father slip away from the nest, and swerve by us. Then we saw swifts settling here and there on the wet rock wall, some starting up again for one more turn. But as was the case in the dim morning light, we could not count the birds. Possibly there were only six outside of the nests. When we left shortly before seven o'clock we could still see the faint forms of Primus and his mother on the nest in their little niche.

We nature guides in Big Basin consider these nests, and any eggs or nestlings they may ever contain, as our prize exhibit; and also, by right of discovery, our private property. We want every one to see nesting Black Swifts at Berry Creek Falls. And so, hands off, please, Mr. Egg Collector!

Los Gatos, California, October 2, 1927.

NESTING OF THE BLACK-TAILED GNATCATCHER

WITH THREE ILLUSTRATIONS

By R. S. WOODS

IN THE CONDOR for November, 1921 (XXIII, p. 173) the writer described the nesting of the Black-tailed Gnatcatcher (*Polioptila californica*) as observed on the brush-covered "wash" of the San Gabriel River at Azusa, California. The following spring the birds drifted away into new territory, so that although they were seen at frequent intervals, a convenient opportunity to follow their home life in detail was not again offered until 1927, when a nest was built very close to the location of the first brood mentioned in that article. In view of the scarcity of literature on this interesting species, it seemed worth while to determine how closely the procedure previously noted would be followed by what would almost certainly be different individuals of a new generation.

About the last of March a pair was seen carrying nesting material, and on April 1 a completed nest was found, situated about three feet from the ground in a buckthorn (*Rhamnus crocea*). On April 5 the male was incubating two eggs, which were

Fig. 53. FIRST NEST OF BLACK-TAILED GNATCATCHER. THE BLACK CAP OF THE INCUBATING MALE CAN BE SEEN ABOVE THE RIM OF THE NEST. APRIL 12, 1927.

increased to three the next morning and to four on the following morning, these apparently having been laid in the evening or early morning.

The duty of incubation was divided substantially as in the earlier instance. During the day the male occupied the nest more than half the time, being relieved by his mate at intervals of approximately one hour. Soon after sunset, however, the female would take her place there and presently, with head tucked in, would be settled for the night. The gnatcatcher's nest is so deep that only the top of the head and the tail of the sitting bird project above the rim. On unusually hot days, however, the birds are accustomed to stand over the eggs with half spread wings.

On one occasion a good-sized Alligator Lizard (*Gerrhonotus scincicauda webbii*) was found immediately beside the nest, possibly waiting until the bird—which seemed unperturbed—should leave the eggs exposed. The reptile was gently but firmly removed to a safe distance before any damage could be done.

The incubation period, which had not previously been ascertained, proved rather longer than anticipated, being 14 days from the laying of the last egg, the time thus equaling or slightly exceeding that of many of our larger passerine birds. Although the eggs were laid on successive days and incubation was apparently begun with the first, or at least the second, egg, all four were hatched within less than 24 hours, either on the evening of April 20 or on the morning of April 21. The bodies of the young were entirely bare until the primaries began to appear, three or four days later.

Fig. 54. SECOND NEST OF BLACK-TAILED GNATCATCHER, WITH FEMALE BROODING. MAY 27, 1927.

On the morning of April 26 it was found that some mysterious fate had overtaken the gnatcatchers. The young were all dead—one in the nest, two in the foliage a few inches away, one on the ground beneath—the parents nowhere to be seen. However, later in the day the old birds were discovered calmly hunting together in the brush some distance away, so the case was diagnosed as one of desertion—a strange dereliction on the part of parents ordinarily so faithful and efficient.

Allowing a reasonable time for the resumption of family duties, the search for a new nest was taken up, with the unwitting assistance of a solitary male gnatcatcher whose wanderings I followed in the belief that it was one of the original pair and which, inadvertently venturing near what proved to be the new nesting site, was fiercely attacked by the resident male and chased quite out of sight. The second nest,

then containing four eggs, was not more than 200 feet from the first, and at a height of about three feet in a small sumac (*Lithraea laurina*), which offered only slight concealment.

The eggs were hatched on or about May 21. As in the former year, the growth of this second brood was probably a little slower than that of the first. The young left the nest on June 5, having occupied it 14 or 15 days, as compared to 9 and 10 or 11 days for the two broods of 1921. This difference is not easily accounted for, but is no greater than that observed in the case of the mockingbird, towhee and other common birds. In some of the slower growing species, such as the Costa Hummingbird and probably the Phainopepla, there seems to be less individual variation in this regard.

Contrary to the disposition of the former pair, the male of this year was of a

Fig. 55. THIRD NEST AND YOUNG OF BLACK-TAILED GNATCATCHER. JULY 14, 1927.

less trustful nature than his mate. He showed considerable fear of the camera and, unlike his manner toward feathered interlopers, would hop from bush to bush with silent suspicion, not daring to brave the unknown danger. As the time approached for the young to leave the nest, the birds' anxiety and distrust increased, though their fear seemed to be for their offspring rather than for themselves.

When a larger bird came near the nest and was not easily intimidated, the male gnatcatcher would dash at it repeatedly, with a rapid snapping of the bill. During the absence of her mate the female undertook to drive away a flock of bush-tits, but with no conspicuous success, as each bird attacked would simply dodge back into the bush. Relations between the gnatcatchers and a Costa Hummingbird which made

his headquarters on the dead top of a nearby bush seemed to be adjusted on a basis of mutual toleration.

The investigations of Messrs. Baldwin and Kendeigh on the behavior of the House Wren (Auk, XLIV, 1927, p. 206), in the course of which they noted periods of inattentiveness, during which the birds were presumably resting or seeking food for themselves, alternating at quite regular intervals with periods of attentiveness to nesting duties, suggested a similar inquiry into the habits of the Black-tailed Gnatcatchers. The following is a record of visits to the nest during a period of an hour and three-quarters on May 31, when the young were just beginning to open their eyes.

MALE		FEMALE		MALE		FEMALE	
P. M.	Interval	P. M.	Interval	P. M.	Interval	P. M.	Interval
4:12		4:12				5:16	4 min.
		4:16	4 min.			5:20	4 min.
		4:23	7 min.	5:21	14 min.		
		4:25	2 min.			5:22	2 min.
4:27	15 min.					5:23	1 min.
		4:31	6 min.			5:24	1 min.
		4:37	6 min.	5:26	5 min.	5:26	2 min.
		4:46	9 min.	5:29	3 min.	5:29	3 min.
4:48	21 min.	4:48	2 min.	5:31	2 min.	5:31	2 min.
		4:49	1 min.	5:33	2 min.		
		4:51	2 min.			5:36	5 min.
		4:53	2 min.			5:37	1 min.
		4:55	2 min.	5:41	8 min.	5:41	4 min.
		4:57	2 min.			5:42	1 min.
		4:58	1 min.	5:44	3 min.	5:44	2 min.
		4:59	1 min.			5:45	1 min.
5:02	14 min.	5:02	3 min.	5:47	3 min.	5:47	2 min.
		5:05	3 min.	5:51	4 min.	5:51	4 min.
5:07	5 min.	5:07	2 min.	5:53	2 min.	5:53	2 min.
		5:09	2 min.			5:55	2 min.
		5:12	3 min.				

The above figures do not seem to cast much light on the question of "inattentive" periods, unless it be that these were enjoyed exclusively by the father of the family. However, he deserves a better reputation than this particular tabulation would give him. During the middle of the day the movements of the birds were more leisurely and the intervals longer, but no less irregular. Most of the insects brought to the nest were too small to be identified at a distance.

A few days after the young birds had left the nest, it was found that three of them had disappeared. The presence of a shrike in the vicinity suggested at least one hypothesis as to their fate. The survivor, like those of broods previously known, was not at this stage especially active, often sitting motionless for considerable periods. At one of these times I noticed that the male parent had some difficulty in finding the young one, whose indifference and stolidity were remarkable as the father bird, with a juicy morsel, called and searched through the bush. On his next trip, the young bird still being in the same place, he had no trouble in locating it. Towards the end of June the young one was being left largely to its own devices, though it still expected food when approached by one of the parents.

By this time, as it afterwards developed, the birds must already have embarked on a third venture, for on July 12, I found a nest with four well-grown young,

situated about 100 yards from the second nest, and still farther from the first. This nest, like the others, was placed about three feet from the ground, in a low shrub, *Ericameria pinifolia.* The material of the previous nest, which had entirely disappeared, was probably used in its construction. The growth of this brood also was evidently comparatively slow, for on July 16, before starting on a vacation trip, I found the young still far from ready to leave the nest. On the first of August two young birds were actively following their parents about. After the middle of August they were still vociferously begging for food, and occasionally receiving it, but for some reason had attached themselves almost exclusively to the male parent, paying little attention to the female, who had perhaps ceased to be a dependable source of supply.

Early in August the seasonal change in the plumage of the male began to be discernible. This replacement of the glossy black cap by the gray body-color continued in the same very gradual manner described in the previous article. It was at about this time that I noticed the only indication of a song that I have ever detected on the part of this species—possibly only a musical inflection of the usual call.

Practically all the utterances of the adults seem to be variations of the rather prolonged, mewing call note, which is often repeated from two to four times in succession. The call of the female is thin and plaintive; that of the male is usually stronger and heavier, and sometimes scolding, but is nearly always characterized by the complaining tone which distinguishes the voice of this species from that of the Western Gnatcatcher (*Polioptila caerulea obscura*). More rarely, the male gives utterance to a series of short, harsh, uninflected notes, such as are used by the male Plumbeous Gnatcatcher (*Polioptila plumbea*).

Probably no other California bird is so strictly confined to the brush-lands as is this. The Cactus Wren shares the same territory, but often comes about houses and dooryards, and sometimes builds nests in orange groves and around buildings, while the Black-tailed Gnatcatcher almost invariably turns back when it reaches the limits of the natural vegetation. The most striking contrast between this species and the Western Gnatcatcher is that of the restricted habitat of the former and the wide-ranging habits and distribution of the latter.

Azusa, California, August 22, 1927.

ADDITIONS TO THE KNOWN AVIFAUNA OF THE SANTA BARBARA ISLANDS

WITH TWO ILLUSTRATIONS

By J. R. PEMBERTON

THROUGH the generosity of Mr. Silsby M. Spalding who placed at our disposal his splendid cruiser "Padariva II" the writer accompanied by H. W. Carriger, Dudley DeGroot and O. W. Howard was enabled to spend the period from March 25 to April 5, 1927, inclusive, among the Channel Islands off the coast of southern California. Howard alone had visited the islands during the nesting season some twenty years before, the rest of us had long craved a chance of clambering over their rugged slopes, and Howard was eager to revisit the spots he had seen so long ago. To those who have made expeditions to any of these islands in fishing boats or small pleasure craft, done all their own work including the cooking and dishwashing, we boastingly record that we were called each morning by the steward, served our meals in courses by a decorous butler and escorted ashore each morning in a swank launch by two uniformed sailors and a regular engineer. About the only thing left undone for us aboard ship was the blowing of the eggs, and the steward even offered to try this for us. So of course we all had a wonderful time, one of those kinds of times that a fellow always remembers. Carriger ate so much that he never was able to go over cliffs after Duck Hawks' eggs as he ought to have been able to; DeGroot had to train off superfluous fat after he got back to romping with the Santa Barbara college boys; Howard, cursed with insomnia ashore, snored all night and must have slept in the daytime when ashore, to judge by his tardiness in returning to the yacht each night; and the writer had to tell a bed-time story every night about who Santa Claus really is.

We visited all of the islands excepting San Nicolas. With the exception of two rainy days on Santa Cruz and two windy ones on Santa Rosa we could not have asked for better weather. Through the courtesy of Edward and Mahlon Vail we were allowed to roam at will the ornithologically unexplored Santa Rosa Island, so we spent three days there. Field notes were kept by DeGroot and Pemberton and nightly discussions of the birds seen, coupled with an examination of Howell's "Birds of the Islands off the Coast of Southern California", enabled us to fix new birds for the list. This paper is a summary of all our notes and observations.

Eighty-two species in all were noted, of which four, the Willow Goldfinch, California Woodpecker and Townsend Solitaire on Santa Rosa, and the Black-and-white Warbler on Santa Barbara, are new birds to any of the islands. Occupied nests were found of twenty-five species. Discoveries resulting in additions to the known fauna of the various islands were three on Catalina, one on San Clemente, seven on Santa Barbara, four on Anacapa, six on San Miguel, and forty on Santa Rosa. The pertinent data concerning these additions follow.

SANTA CATALINA ISLAND

We spent the afternoon of March 25 at the Isthmus and in country immediately to the west for a few miles on both slopes.

Oxyechus vociferus. Killdeer. Four birds were seen by DeGroot and Howard.

Calypte costae. Costa Hummingbird. A single individual adult male in breeding plumage sat on a bush within a few feet of Carriger and Pemberton and was positively identified.

Ixoreus naevius meruloides. Varied Thrush. Two birds were seen by DeGroot and Howard.

SAN CLEMENTE ISLAND

Colaptes cafer collaris. Red-shafted Flicker. Several birds were seen by all of us on March 26 in the woods of the canyons on the eastern side of the island.

SANTA BARBARA ISLAND

We spent March 27 here and visited practically every part of this small island.

Falco sparverius phalaena. Desert Sparrow Hawk. We all saw four birds and believed them to represent two pairs.

Speotyto cunicularia hypugaea. Burrowing Owl. Carriger and DeGroot saw two birds on the southern part of the upland slope.

Colaptes cafer collaris. Red-shafted Flicker. Two Flickers were seen by all of us.

Passerella iliaca (ssp?). A single Fox Sparrow was seen on the ground beneath a dahlia thicket by Pemberton.

Fig. 56. NEST OF OSPREY ON SAN CLEMENTE ISLAND.

Mniotilta varia. Black-and-white Warbler. An adult male of this species was seen by Pemberton at a distance of less than fifteen feet and positively identified. The bird was working its way through the dahlias and its habit of creeping around the trunks of these plants after the manner of creepers established its identity beyond a doubt. This is a new species for the islands. The bird has been recorded from the Farallones and a few places along the southern California coast.

Thryomanes bewickii charienturus. San Diego Wren. Several of these birds were seen by all of us.

Turdus migratorius propinquus. Western Robin. Several were seen by Howard.

ANACAPA ISLAND

We spent March 28 here and visited nearly every part of this island.

Buteo borealis calurus. Western Red-tail. A pair of these hawks were seen by all of us as they circled high over the crest of a cliff, and later they were seen building a nest on a steep rocky slope on the south side of the main island.

Sayornis saya. Say Phoebe. A single bird was noted by Howard.

Zonotrichia leucophrys gambelii. Gambel Sparrow. These birds were found abundantly where ever suitable cover existed on the island.

Melospiza melodia clementae. San Clemente Song Sparrow. Following the treatment by van Rossem (CONDOR, XXVI, November, 1924, p. 219) the Song Sparrows which we noted commonly in the dahlia thickets are referred to this race.

SAN MIGUEL ISLAND

We spent the afternoon of March 31 on Prince Islet and all the day of April 1 on the main island.

Colymbus nigricollis californicus. Eared Grebe. A flock of about twenty-five of these birds was seen by all of us on March 31. They were swimming close together in the quiet waters of Cuyler Harbor close to the yacht.

Mergus serrator. Red-breasted Merganser. Two were noted by DeGroot and Pemberton close to Prince Islet.

Aeronautes melanoleucus. White-throated Swift. DeGroot noted swifts high in the air over the west end of San Miguel Island.

Fig. 57. NEST AND EGGS OF BALD EAGLE ON SAN MIGUEL ISLAND.

Passerculus sandwichensis alaudinus. Western Savannah Sparrow. DeGroot noted these small sparrows in the grass with the Horned Larks on the western end of San Miguel Island.

Zonotrichia leucophrys gambelii. Gambel Sparrow. Abundant in the dahlia thickets on both Prince Islet and on the main island.

Hirundo erythrogaster. Barn Swallow. Noted by all of us on both days.

SANTA ROSA ISLAND

With the ship anchored in Belcher's Bay we spent April 2, 3 and 4 exploring the canyons and higher ridges reached from this bay. We probably examined the most interesting fourth of the entire island. Howell gave an erroneous impression of this island in his book when he stated that "the island is covered with vegetation but there are no large trees". The part visited by us is fully as attractive as some of the best parts of Santa Cruz Island and the deep canyons are thickly wooded with immense oaks, sycamores and willows, while at their heads are considerable numbers of Monterey pines. The iron-wood tree, *Lyonothamnus floribundus*, grows in large groves near the center of the island. The ridges between some of the canyons are covered with thick oak brush associated with many other shrubs. Water is abundant in all the canyons. There is a small grove of Torrey pines on the edge of the sea cliff in the eastern part of Belcher's Bay. The western and southern parts of the island are wind-swept to such a point that no heavy woods or brush is to be found excepting in the sheltered canyons. The following list of birds is an indication of the diversity of this island.

Aechmophorus occidentalis. Western Grebe. Two were seen by Pemberton and Howard swimming in the sea, April 2.

Colymbus nigricollis californicus. Eared Grebe. A flock of less than twenty birds was noted by Howard and Pemberton at the same time as the last species. These birds frequently all dove together and would reappear at some distance still in flock formation.

Gavia pacifica. Pacific Loon. Several loons were noted on April 3 by Pemberton.

Larus heermanni. Heermann Gull. Four were seen by Pemberton on April 3.

Phalacrocorax penicillatus. Brandt Cormorant.

Phalacrocorax pelagicus resplendens. Baird Cormorant. Many of these two cormorants were seen on April 3. Both species were observed nesting on San Miguel and Santa Barbara islands and no doubt were nesting here also.

Totanus melanoleucus. Greater Yellow-legs. A single bird was seen by Carriger and DeGroot on the sea-shore on April 3.

Zenaidura macroura marginella. Western Mourning Dove. Four doves were seen by Pemberton on April 3, and three the following day by DeGroot.

Accipiter cooperii. Cooper Hawk. A male and female were seen by Carriger and DeGroot on April 2 in heavy timber near the head of one of the canyons.

Buteo borealis calurus. Western Red-tail. Two pairs were seen, both nesting. Carriger took a set of eggs on April 3 from a nest on a cliff in a canyon west of Belcher's Bay.

Haliaëëtus leucocephalus. Bald Eagle. Ten eagles were counted and three nests found, two of which contained small young. All of the nests were placed in trees, two of them in small trees well down in sheltered canyons and the third in one of the Torrey pines at the sea-coast. Apparently the strong winds of this island prevent the eagles from building their nests on cliffs and pinnacles as they do on the other islands.

Falco peregrinus anatum. Duck Hawk. Three pairs were located, two of which were far inland in canyons. We believed that we located their nests but no eggs had yet been laid in them.

Falco sparverius phalaena. Desert Sparrow Hawk. A single bird was seen by Pemberton on April 2 in a sycamore near the mouth of one of the canyons.

Tyto pratincola. Barn Owl. Two birds were flushed out of a cave on April 3 by Carriger and DeGroot, and some boys from the headquarters ranch described the birds to Howard as living in the top of the tank house.

Asio wilsonianus. Long-eared Owl. A single bird was seen several times by Pemberton on April 2, as it flew in advance of him under heavy oak timber.

Speotyto cunicularia hypugaea. Burrowing Owl. None of these birds was seen by us, but the species is included here because of an accurate description of it which was given by the ranch boys. The birds have been recorded from all the other islands and should be present here. The opportunity did not present itself for any of us to accompany the boys to the place where these owls lived.

Melanerpes formicivorus bairdi. California Woodpecker. On April 2, Carriger and Pemberton heard the call note, and on the following day Howard saw two birds several times as they flew about in heavy oak timber. The presence of this bird here was a distinct surprise to all of us and probably constitutes our most satisfactory addition to the avifauna of the islands, because the bird has not heretofore been noted on any of them. We could have collected both birds but refrained for obvious reasons.

Colaptes cafer collaris. Red-shafted Flicker. We all saw several in the oak timber.

Selasphorus alleni. Allen Hummingbird. Carriger and DeGroot found many nests of this species, containing both eggs and young birds. It was numerous along the water courses lined with willows.

Calypte anna. Anna Hummingbird. DeGroot saw one bird close enough to make for positive identification.

Sayornis saya. Say Phoebe. DeGroot saw a single bird on April 3.

Empidonax difficilis. Western Flycatcher. A few were seen by Carriger and Pemberton in deep shady canyons on April 2. One old nest was found.

Passer domesticus. English Sparrow. Quite a little colony of these birds exists about the ranch buildings at Belcher's Bay.

Spinus pinus. Pine Siskin. DeGroot saw a few on April 3.

Astragalinus tristis salicamans. Willow Goldfinch. DeGroot saw at close range an adult male of this species on April 3. This is a new bird for any of the islands.

Astragalinus psaltria hesperophilus. Green-backed Goldfinch. This was a common bird along the more open parts of the lower courses of the canyons. Howard took a set of their eggs on April 2.

Passerculus sandwichensis alaudinus. Western Savannah Sparrow. Carriger and Pemberton on April 2 noted quite a number of these birds in company with the Horned Larks on the grassy uplands.

Zonotrichia leucophrys gambelii. Gambel Sparrow. Abundant everywhere in thick brush and in fields near brushy patches.

Zonotrichia coronata. Golden-crowned Sparrow. DeGroot saw one bird of this species on April 2.

Aimophila obscura. Santa Cruz Island Sparrow. Howard noted a pair of Rufous-crowned Sparrows on April 2, which may be assumed to have the same characteristics which typify the race living on Santa Cruz Island and described by Dickey and van Rossem under the above name.

Hirundo erythrogaster. Barn Swallow. Many of these swallows were seen by all of us as they flew in small flocks over the more elevated portions of the island.

Vireo huttoni. Hutton Vireo. Frequently seen on April 2 by Carriger and Pemberton, and one fresh nest found.

Dendroica auduboni. Audubon Warbler. Three birds were seen by Pemberton on April 3.

Anthus rubescens. Pipit. Pemberton saw a few of these birds on the higher plateaus with the Horned Larks on April 3.

Mimus polyglottos leucopterus. Western Mockingbird. A common bird. Carriger took a set of eggs on April 2.

Myadestes townsendi. Townsend Solitaire. A single bird was collected on April 3. This is a new species for any of the islands.

Hylocichla ustulata. Russet-backed Thrush. Pemberton saw two birds on April 3 and, except for a few tail feathers, was unsuccessful in collecting one of them. They were seen in deep canyon oak brush and positively identified.

Hylocichla guttata guttata. Alaska Hermit Thrush. Quite common in the canyon bottoms and frequently seen as we looked for the nests of the Dusky Warbler.

Turdus migratorius propinquus. Western Robin. DeGroot saw on April 4 a flock of about twenty on the higher ground of the western side of Belcher's Bay.

Ixoreus naevius. Varied Thrush. Four dead birds were found and examined by all of us on April 2.

In addition to the above list of new birds for Santa Rosa Island we noted all of the species of land birds listed by Howell for this island with the exception of the Bell Sparrow, which had been noted here by Willett.

Beverly Hills, California, November 11, 1927.

THE TIBIO-TARSUS OF THE FOSSIL HAWK *BUTEO TYPHOIUS*

WITH FOUR FIGURES

By ALEXANDER WETMORE

MR. HAROLD J. COOK has forwarded recently the lower half of a right tibio-tarsus of a hawk secured in fossil beds near Agate, Nebraska, with the statement that it was secured in the Stenomylus Quarry, located about two miles southeast of the Agate Springs fossil site. It comes from the fossil horizon about 60 feet below the top of the Lower Harrison beds, from a deposit that has yielded a number of skeletons of the small cameloid *Stenomylus* that has given the quarry its name. The specimen (collection Harold J. Cook, no. HC 477) was found exposed with the upper end broken off and gone. It is grayish white in color, well fossilized and has a somewhat roughened, porous appearance on part of the shaft, indicating that it comes from a juvenile bird in which the limb bones were not wholly hardened. Its characters are, however, fully developed.

This bone (figs. 58 to 61) is of characteristic buteonine form and after due comparison is identified as *Buteo typhoius* Wetmore (Bull. Amer. Mus. Nat. Hist., vol

Fig. 58 Fig. 59 Fig. 60 Fig. 61

BUTEO TYPHOIUS: Fig. 58, ANTERIOR VIEW OF RIGHT TIBIO-TARSUS; fig. 59, INTERNAL FACE OF RIGHT TIBIO-TARSUS; fig. 60, EXTERNAL FACE OF RIGHT TIBIO-TARSUS; fig. 61, VIEW OF DISTAL ARTICULAR SURFACE. ALL FIGURES NATURAL SIZE.

48, Dec. 3, 1923, p. 489) described from a broken metatarsus secured from the Upper Miocene level of the Snake Creek beds, twenty-three miles south of Agate, Sioux County, Nebraska.

The lower ends of the tibio-tarsus in modern *Buteo borealis* and *Geranoaëtus*

melanoleucus are very similar in form. *Buteo borealis* in the material at hand has the internal tubercle for the oblique ligament more heavily developed, while in *Geranoaëtus* the area immediately above the tendinal bridge is relatively broader and more concave. In *Buteo* the proximal margins of internal and external condyles also have a somewhat more pronounced overhang or projection.

In all of these points the fossil agrees with *Buteo borealis,* differing from that species in the relatively larger external condyle and somewhat heavier internal condyle. In the fossil there is a distinct impression marking the attachment of the lower end of the fibula, but the fibula itself is entirely gone. The lack of ankylosis at this point is explained by evident immaturity.

The fossil specimen, which is only slightly larger than largest females of *Buteo borealis,* is from an individual slightly smaller than the type of *Buteo typhoius* but is within the range of individual variation usual in the genus. Its characters are shown in the accompanying figures. Measurements are as follows: transverse breadth across condyles 15.0 mm., depth of internal condyle 10.8, depth of external condyle 11.0 (approximate), smallest transverse diameter of shaft 7.7 mm.

The outer face of the external condyle is rounded in outline but is flattened distally; the proximal anterior margin forms a sharp angle with the shaft; posterior margin somewhat broken; outer face concave, bounded distally by a heavy, rounded margin with an elongated ridge on the lower end of the shaft immediately above the depression; internal condyle rounded, but more flattened than the outer, with a more distinctly projecting margin; a strongly marked central tubercle projecting nipple-like with abrupt sides; proximal margin of inner tubercle extended as an inward sloping ridge to join the shaft at a point slightly above the level of termination of the proximal margin of the external tubercle; intercondylar fossa broad and open in front, slightly raised above level of shaft, with outer margin more abrupt and inner margin gently sloping; intercondylar sulcus shallow; tendinal bridge moderately strong, arched, with a strongly marked excavation beneath the margin of the internal condyle; tendinal groove broad, merging gradually above into level of shaft; shaft flattened below, somewhat heavier above, with a groove on outer face at lower end for attachment of fibula.

As this record comes from the Lower Harrison beds according to present concept it is representative of Lower Miocene time, a spatial extension of range since the type of *Buteo typhoius* is described from Upper Miocene material. The allocation of the bone under discussion has been made only after careful study with due consideration of the differences in mammalian faunas for the two horizons in question. It is possible that with more material the Lower Harrison *Buteo* may prove distinct, but there is nothing in the bone at hand to warrant its separation.

The drawings illustrating this paper have been made by Mr. Sydney Prentice.

United States National Museum, Washington, D. C., October 12, 1927.

TOXOSTOMA CURVIROSTRIS: I. DESCRIPTION OF A NEW SUBSPECIES FROM THE LOWER RIO GRANDE

By J. EUGENE LAW

BIRDS of the species *Toxostoma curvirostris* from southern Texas have long been regarded as representative of the typical subspecies, but in discussing the matter with him in 1916 Dr. H. C. Oberholser told me that the southern Texas birds were not typical. This led to a study of the birds from the range limits of the species. Dearth of fresh-plumaged material from both regions has, no doubt, been responsible for the inclusion of the Texas birds with those of the Mexican tableland, whence came the type of the species.

Nevertheless, a series of specimens collected for me in the Chiricahua Mountains of southeastern Arizona and such specimens as I have been able to examine from southern New Mexico are true *Toxostoma curvirostris curvirostris* and cannot satisfactorily be differentiated from those of southern Mexico by any tests that I have been able to devise.

It is a pleasure to compliment Dr. Oberholser's deference to me in the naming of the subspecies which I now present, and to connect his name with a bird from the state to whose ornithology he has given much time.

Toxostoma curvirostris oberholseri, new subspecies. Brownsville Thrasher.

Type and type locality.—No. 165931, Biological Survey, U. S. Nat. Mus.; San Diego, [Duval County], Texas; female [adult], collected April 17, 1900, by H. C. Oberholser.

Diagnosis.—On mass average, the smallest form of the species. Beak, in adults, usually evenly tapered, attenuate, near acute; spots of breast large for the species, deltoid; terminal spots on three or four pairs of lateral rectrices, abruptly defined, white; wash of ventral aspect buff-cream in early autumn, deepening posteriorly toward cinnamon-buff; flanks brown.

Comparison.—The white terminal spots of the lateral rectrices combined with the near-equal length of wing and tail differentiate *oberholseri* from *palmeri*, *occidentalis* and *maculata* of the Pacific watershed. From *curvirostris*, its nearest neighbor, of the continental highlands, *oberholseri* only differs in shorter length of wing and tail. Such specimens as are in autumnal plumage reveal no reliable color differences, though freshly-collected newly-molted series, when such can be assembled, may substantiate an impression that the browns in *oberholseri* are slightly more slaty, less pure brown, and the buffs paler than in *curvirostris* and that the near black spots which are sometimes present on the fore-belly are less common and smaller in *oberholseri*.

Measurements.—Females exhibit no consistent differences from the males in size or coloration. As indicated by the following table of conventional measurements, made from autumn specimens, the birds of the continental highlands average more than 5 mm. longer in both wing and tail.

	Wing	Tail	Exp. cul.	Tarsus
Lower Rio Grande	102.9	105.1	28.0	34.4
10 ♂♂	(98.3-108.4)	(98.2-110.5)	(25.8-29.9)	(32.3-36.2)
Chiricahua Mts.	108.9	112.4	31.1	34.6
10 ♂♂	(103.8-112.5)	(107.7-117.3)	(29.1-32.9)	(32.6-35.8)
Southern Mexico, Gulf slope	112.3	110.6	28.1	34.5
5 ♂♂	(110.0-116.1)	(108.0-116.2)	(26.7-29.2)	(32.4-36.4)

Range.—The material at hand does not carry this small race out of the lowlands of southern Texas and of northeastern Mexico (Tamaulipas, Nuevo Leon and Coahuila). More than 75 percent of the stations recorded on the labels of the series examined are under 500 feet altitude; none apparently is over 2000 feet.

Remarks.—At the western border of these lowlands rise the Sierra Madre Oriental of Mexico. How far *oberholseri* as a distinguishable subspecies spreads over

these highlands, remains problematical. No specimens have come into my hands from the entire region of this mountain chain nor from its broad slopes to the westward, nor do I find any records of the species from this region. However, I question if such hiatus between the range of *oberholseri* and that of *curvirostris* actually exists, since it seems probable that the species will be found to occur throughout the Sonoran Zone areas which must abound in this region.

Altadena, California, January 24, 1928.

A NEW POOR-WILL FROM THE COLORADO RIVER VALLEY

By DONALD R. DICKEY

FOR SOME YEARS the Poor-wills inhabiting the valley of the Colorado River in California and Arizona have generally been held to represent the race *Phalaenoptilus nuttallii nitidus* described by Brewster (Auk, IV, 1887, p. 147) from Texas. This assumption was apparently based on the probability of the birds being similar all along the Mexican border, rather than by actual comparison with adequate material. Soon after the receipt of the splendid assemblage of material generously sent me some time ago by L. B. Bishop, L. M. Huey, J. E. Law, the Museum of Comparative Zoology, the Museum of Vertebrate Zoology, the San Diego Society of Natural History and the United States Biological Survey, it became apparent that there was a marked distinction between the birds from the range of *Phalaenoptilus nuttallii nuttallii* in general and those from the Colorado River Valley; but before naming the latter it was necessary to compare the two types upon which Brewster based his name *nitidus*.

Through the courtesy of Outram Bangs, A. J. van Rossem has recently made an examination of these two birds, which are in the Museum of Comparative Zoology, no. 213,076, a male, and no. 213,077, a female, both taken on the Nueces River, Texas, February 27, 1886. Van Rossem found this pair typical of the silver-gray type which is generally regarded as the light phase of *nuttallii*, and I am therefore able to give a name to our Colorado River Valley bird. In doing so it is with peculiar fitness that I dedicate this bird to Laurence M. Huey, since the subspecies is largely based on the splendid series he and Mrs. May Canfield secured for me through the effective use of the flashlight as a clever collecting ruse.

Phalaenoptilus nuttallii hueyi, subsp. nov. Huey Poor-will.

Type.—Female adult; no. J 973, collection of Donald R. Dickey; Bard, Imperial County, California, altitude 140 feet; May 8, 1921; collected by May Canfield and Laurence M. Huey; original no. 163.

Subspecific characters.—Nearest in color to the light type of *Phalaenoptilus nuttallii nuttallii* (Audubon), which Brewster named *nitidus* and to which he gave the eminently fitting vernacular of the Frosted Poor-will, but averaging very much lighter. The backs of *hueyi* are a pinkish tan, almost devoid of the silver frosting characteristic of more eastern birds, and with the size of the dark dorsal "owl's eye" marking greatly reduced, in many cases practically obsolete; under parts lighter throughout, with the dark band below the white collar narrower and of lighter tone, and with narrower barring of sides and flanks. Tail lighter and less contrastingly barred both above and below.

Measurements of type.—Wing, 139.5 mm.; tail, 84.0; tarsus, 15.0; middle toe minus claw, 17.2.

Range.—Lower Colorado River valley in Arizona and California.

Specimens examined.—Phalaenoptilus nuttallii hueyi: California: Imperial

County: Bard, 5 (including the type); Potholes, 19; 8 miles east of Picacho, 1; Colorado River opposite Cibola, 2. Riverside County: Blythe, 1; Riverside Mountain, Colorado River, 1. Arizona: above Bill Williams River on Colorado River, 1. *Phalaenoptilus nuttallii nuttallii:* Nevada, 6; Utah, 2; Mexico: Sonora, 5; California (localities east of the Sierra Nevada and from the range of *hueyi* in migration), 63; Arizona, 31; Montana, 1; Kansas, 3; Texas, 10 (including the types of *"nitidus"*). *Phalaenoptilus nuttallii californicus* Ridgway: California (west of the Sierra Nevada and coastal slope of southern California), 40.

California Institute of Technology, Pasadena, California, December 24, 1927.

NOTES ON THE SYSTEMATICS OF WEST AMERICAN BIRDS. II

By JOSEPH GRINNELL

THE POOR-WILLS OF LOWER CALIFORNIA

ACCUMULATION of specimens of *Phalaenoptilus nuttallii* from Lower California shows the presence of three races within that territory: (1) that of the northwestern section, chiefly on the Pacific slope north of latitude 30°, which can properly be covered by the subspecific name *californicus;* (2) the race of the Colorado Desert at the extreme northeast, an excellent form upon which the name *hueyi* is bestowed by Mr. Dickey on a preceding page of the present issue of THE CONDOR; and (3) a race resident in the main part of the peninsula, south from about latitude 30°, for which the name *nitidus* has been used by Brewster (1902) and by Thayer and Bangs (1907). The name *nitidus,* however, cannot be used for this third race. As Dickey has just shown, it was based on specimens (from Texas) representing *nuttallii* proper in probably a light phase of coloration. It seems therefore in order to name the Lower California peninsular race, which I now do.

Phalaenoptilus nuttallii dickeyi, new subspecies. San Ignacio Poor-will.

Type.—Male adult, no. 50820, Mus. Vert. Zool.; San Ignacio, latitude 27°, Lower California; May 17, 1927; collected by Chester C. Lamb; orig. no. 7669.

Diagnosis.—Among the poor-wills in general, all races of *Phalaenoptilus nuttallii,* size small and general tone of coloration dark. Similar to *Ph. n. californicus* in degree of general darkness but decidedly smaller, and with black areas on the individual feathers of scapulars, top of head and chest greatly reduced, in this respect resembling *hueyi;* terminal white of lateral rectrices greater in amount than in *californicus;* light portions of general color scheme much darker than in *hueyi* or *nuttallii,* tinged with clay color rather than "frosted"—in this respect darker even than in average *californicus;* dark barring on posterior lower surface much more extensive and heavier than in *hueyi* or *nuttallii.*

Measurements.—Of type: wing, 130.0 mm.; tail, 80.8. Of two other adult males, from San Ignacio and near Calmallí, respectively: wing, 129.0 and 133.3; tail, 79.2 and 83.2. Compare with measurements given by Ridgway (Birds N. and Mid. Amer., VI, 1914, pp. 549-550) and by Grinnell (Univ. Calif. Publ. Zool., vol 12, 1914, pp. 141-142). The latter's *"nitidus"* of course equals *hueyi.*

Remarks.—Statements of general distribution, with details of fact, are set forth in my "Summation" of Lower California ornithology now in press. I have studied the type and co-type of Brewster's *nitidus,* from Nueces River, Texas (now nos. 213076-77, Mus. Comp. Zool.). They are characterized by having the lower abdomen buffy, only obsoletely barred, the lower breast predominantly "frosty", and the upper surface *very* silvery; wing-length in male, 140 mm., in female, 135. They are thus quite different from *dickeyi.*

I take pleasure in selecting to designate the new race of poor-will here described, the name of one who not only has identified himself with the study of the group of

birds concerned, but has served importantly both in his own work and indirectly as he makes possible work by others, in raising and holding high the standards of systematic ornithology.

THE SAN DIEGO PLAIN TITMOUSE

Material now available representative of the plain titmouse in a series of localities along most of the way from the Sierra San Pedro Mártir in Lower California to San Diego County, Upper California, and thence northward, shows that a mistake was made in bestowing a new name on the subspecies having its differentiation center in the Sierra San Pedro Mártir. (See Grinnell and Swarth, Univ. Calif. Publ. Zool., vol. 30, 1926, p. 164, where *Baeolophus inornatus affabilis* is named, with type from Concepción, 6000 feet altitude, in those mountains.)

Ridgway's *Baeolophus inornatus murinus* was described (Proc. Biol. Soc. Wash., XVI, 1903, p. 109) from Nachoguero Valley, a locality visited by Mearns on the Mexican boundary survey with which he was connected and situated a few miles below the line not far southwest from Jacumba. I had always assumed that birds from there would naturally fall with the subspecies belonging to the San Diegan subfaunal district; but this proves not to be the case. Under the auspices of the Museum of Vertebrate Zoology, Mr. Chester C. Lamb was commissioned to visit Nachoguero Valley for the express purpose of obtaining topotype series of the several vertebrates described from there. This he did the past fall, obtaining a splendid series of the plain titmouse in fresh annual plumage. While this series is not quite extreme of the San Pedro Mártir race, it is in characters on that side of the median line in the belt of intergradation between the San Diegan race and the San Pedro Mártir one. This outcome makes it necessary to use the name *murinus* for the latter subspecies and to propose a new name for the San Diegan race—which I now do.

Baeolophus inornatus transpositus, new name. San Diego Plain Titmouse.

Type.—Male, no. 38685, Mus. Vert. Zool.; Mount Wilson, Los Angeles County, California; December 12, 1896; collected by J. Grinnell; orig. no. 1828.

Characters.—As compared with *B. i. inornatus*, slightly larger and grayer, bill much heavier. As compared with *B. i. murinus*, browner, decidedly less leaden gray in cast of coloration; bill and feet less blackish, rectrices and remiges brownish rather than plumbeous.

The *concept* of these subspecies thus remains exactly as set forth by Grinnell and Swarth. But, as not infrequently happens, the locality whence came the type upon which the earliest name was based lies between the metropolises of the two forms distinguished; and, to repeat, in this case fresh-plumaged topotypes prove to be nearer the southern race than the northern.

THE SAN DIEGO BEWICK WREN

For much the same reasons as with the plain titmouse, a shift of names becomes necessary among the Bewick wrens. Grinnell (Auk, XLIV, 1927, p. 72) described *Thryomanes bewickii carbonarius* with type from San José, latitude 31°, at the west base of the Sierra San Pedro Mártir. The type of Oberholser's *T. b. charienturus* (Proc. U. S. Nat. Mus., XXI, 1898, p. 435) was a Mearns-taken specimen, of date June 5, from Nachoguero Valley, in extreme northern Lower California a few miles southwest from Jacumba, San Diego County, Upper California. Fresh fall examples now at hand from exactly that locality show themselves to be, not as I had heretofore assumed they would be, of the San Diegan district race, but almost indistinguishable from the San Pedro Mártir race. Hence it becomes necessary to use the name *charienturus* for the "Sooty Bewick Wren" of the San Pedro Mártirs and to invent a new name for the race of the San Diegan district—which I do as follows.

Thryomanes bewickii correctus, new name. San Diego Bewick Wren.

Type.—Male, no. 38287, Mus. Vert. Zool.; Pasadena, Los Angeles County, California; September 17, 1897; collected by J. Grinnell; orig. no. 3149.

Characters.—As compared with *T. b. drymoecus*, dorsal tone of coloration decidedly lighter, "warmer" brown, light bars on tail paler, and tail longer (*fide* Oberholser, *loc. cit.*, p. 438); as compared with *T. b. charienturus* (="*carbonarius*"), dorsal coloration paler, warmer brown, "ground" of wing and tail feathers brown rather than sooty, and bill and feet brown rather than blackish (as per Grinnell, *loc. cit.*).

Oberholser remarks upon a "fine series" from Pasadena as exemplifying his "*charienturus*", though noting slight departures from his type. I select as the type of *correctus* one of that very series from Pasadena!

THE ROCK WRENS OF LOWER CALIFORNIA

Under the name *Salpinctes guadeloupensis proximus*, Swarth (CONDOR, XVI, 1914, p. 215) described a supposed new race of rock wren from San Martín Island, Lower California. This island lies near latitude 30° on the Pacific side of the peninsula less than four miles from the nearest point on the mainland coast. The basis was a single specimen which appeared to Swarth, with the limited material than available to him, much more like *guadeloupensis* than *obsoletus*. This led him to propose the trinomial name constituted as above.

In 1925, the Museum of Vertebrate Zoology came into the possession of a series of 24 adult and juvenile rock wrens from San Martín Island, as also a few specimens from the adjacent mainland. First of all, the peculiarities of the type of *proximus* showed themselves extra-ordinary for that locality, especially as to length of bill, the character of most significance. Said type, now before me (no. 27079, Mus. Vert. Zool.) is in much worn plumage. This accounts in some measure, I think, for the seemingly great length of bill; for the feathers about the base of the bill, especially those on the forehead, shorten, even retreat in a sense with wear, thus "exposing" more of the culmen for measurement. Better than the culmen, therefore, is the dimension bill-from-nostril, that is, interval between anterior margin of nostril and farthest end of culmen. This in the type of *proximus* is 16.3 millimeters; in four other adult males from San Martín Island, 14.5, 14.1, 13.9, 13.4. It is to be granted here that the type in question shows, in fact, quite as long a bill as some specimens of *guadeloupensis*. As to peculiarities of color, those of the type of *proximus* are, I think, due chiefly to wear, which in this genus reduces grays and brings out the fundamental barring obscured in the fresh plumage. Some of the San Martín summer-taken specimens show new feathers on the dorsum and these are extreme in grayness.

Secondly, a study of the material acquired in 1925 showed without a doubt that the rock wrens of the adjacent mainland of Lower California, in the San Quintín (or San Pedro Mártir) subfaunal district, are identical in characters down to the last detail with those from San Martín Island. Furthermore, judging from fresh fall birds, I thought these showed good differences from corresponding birds of Upper California. These differences in the materials compared consisted of an appreciably grayer or slatier tone of color on head, back, wings and tail, in the "San Quintín district" birds, both adults and juvenals, and in a seeming tendency toward longer bill in them. On this basis I have for two years carried the heading *Salpinctes obsoletus proximus* in my Lower California manuscripts as applying to "the subspecies occupying the San Quintín district."

But since 1925 material has kept coming in, both from various parts of Lower California, and from elsewhere within the general range of *Salpinctes;* and furthermore I have had opportunity of examining the collections of rock wrens in several large Eastern museums (see Grinnell, Condor, XXIX, 1927, p. 165). Swarth's (*loc.*

cit., p. 216) comments upon the "great variation shown in series of *Salpinctes obsoletus*" become now more emphatically pertinent than ever.

To come to a quick conclusion, the differences at one time thought by both myself and Swarth to suffice for recognizing a subspecies *"proximus"*, now, just as in the case of the supposed race *"pulverius"* (see Grinnell, *loc. cit.*), seem at best mere "tendencies"—elusive, subject to recurrence in individuals almost anywhere within the range of the species. For example, the gray "bloom" of the Lower Californian birds is shown quite indistinguishably by some fresh fall birds just obtained from San Miguel Island, Upper California. Under the circumstances, therefore, I now consider the best course to refer the rock wrens of the entire territory of Lower California, save Guadalupe Island, to *Salpinctes obsoletus obsoletus*. The Guadalupe Island race is good, of course, but the trinomial, *Salpinctes obsoletus guadeloupensis*, should be used for it, because increased material shows that individual variation in various respects quite bridges over the once supposed gap in characters between that insular form and the continental race.

Museum of Vertebrate Zoology, University of California, Berkeley, January 15, 1928.

FROM FIELD AND STUDY

Bears and Hawks.—Mr. Dixon's note in the last CONDOR (XXIX, 1927, p. 271), on the bear attempting to break into the woodpecker's nest, recalls a statement made by Mr. A. D. Henderson of Belvedere, Alberta. Mr. Henderson relates that in the Peace River country northwest of Belvedere, where he has had considerable experience, he noted that practically all the poplar trees containing large hawk's nests had at one time or another been climbed by bears. On the smooth, pale bark of these trees bear claws make very heavy characteristic scores that persist for many years as conspicuous black scars. Such nests are usually occupied in that country by Red-tailed Hawks or Goshawks, Great Horned or Great Gray owls. The natural assumption is that bruin is one of our original egg collectors and knows as well the meaning of these great masses of sticks in the tree-tops as any oologist.— P. A. TAVERNER, *National Museum of Canada, Ottawa, November 24, 1927.*

The Pileated Woodpecker Feeds on Berries.—It was the 19th of September, 1927. The day was drawing to a close, and already long shadows were reaching out into the valley from the great south wall when we passed Camp Curry. Suddenly the quiet of late afternoon was broken by the loudly shouted, high-pitched notes of the Pileated Woodpecker *(Phloeotomus pileatus picinus)*. For years a lonely Pileated has roamed the Yosemite Valley and his startling notes have thrilled us time and again. Sometimes we look up to see him winging his steady way up or down the valley. Sometimes we have found him whacking off great chunks of bark in search of food. Today we had a new experience when we saw this great woodpecker, a bird as large as a crow, behaving like a chickadee. We were surprised, too, to learn that he had a taste for fruit.

Beside the road, with branches overhanging it, stands a group of mountain dogwoods *(Cornus nuttalli)*. These trees bore this year a heavy crop of fruit. At the end of each flower stalk was a bunched cluster of ripe berries. The Pileated Woodpecker was here today to collect his toll of fruit. The fruit being at the ends of slender branches we thought the heavy-bodied bird would be out of luck. How could the big fellow reach the fruit? He was apparently not just sure himself. At first he tried walking out the heavier branches; but always as he approached the tip-ends they bent under his weight and threw the berries beyond reach. By working out on a cedar branch that intermingled with the dogwood branches he did manage to get a taste of fruit, just enough to tease his appetite. He was not to be cheated, however; for his next move was to flutter clumsily up to a branch containing berries, clutch the branch firmly with his strong feet, and then drop to swing like a great pendulum. He now had the system. Swinging head down he would pick the berries one by one, loosen his hold, swing into flight and then repeat the performance on another branch.

All this took place at the side of a much traveled road, with automobiles passing every few minutes. Occasionally he took to flight when a machine passed, but most often he held his ground. Twice a car passed directly below him while he hung to out-reaching branches.—CHARLES W. MICHAEL, *Yosemite, California, November 6, 1927.*

Bird Casualties Due to Automobiles.—At various times reports have been made as to the number of birds killed by automobiles. One such note is by F. B. White, in *The Auk* (XLIV, 1927, p. 265), who reports having noted only two dead birds in a distance of 2500 miles.

On June 1 of this year I made a trip from Berkeley to Redding, California, a distance of 239 miles. In this distance I counted 14 birds, 3 squirrels and 4 jack rabbits that had been killed by automobiles. Without stopping my car I was able to identify one Coot, two Red-winged Blackbirds, one California Woodpecker and one English Sparrow, out of the above number.—ERNEST D. CLABAUGH, *Berkeley, California, October 10, 1927.*

Some Bird Records from Northern Lower California.—During the months of June and July, 1927, while the writer was occupied with field work for the San Diego Society of Natural History, with the coöperation of the Mexican Government, in portions of the inland section of northern Lower California, the following bird records were made which seem worthy of note. The trip was principally for mammalogical purposes, and, in some of the cases where birds were only "observed," it was by reason of the observer's not having a gun in his hand at the time; for he is a firm believer in the collected specimen, when establishing records. For geographical convenience the short list of birds is given chronologically rather than in the order of the check-list.

The time between June 9 and June 12 was spent among the large junipers immediately west of the Ojos Negros ranch house, which is situated on the western side of Valle San Rafael. At this point Gray Vireos *(Vireo vicinior)* were breeding commonly and a number of specimens were collected. Several pairs were seen feeding young just out of the nest, and on June 10 a nest was found containing four young almost ready to fly. A visit to a small marsh that surrounded a pond some three and a half acres in extent, near the ranch house, revealed the presence of six pairs of Cinnamon Teal *(Querquedula cyanoptera)*. On the evening of June 11, when mouse traps were being set through this marsh, a mother teal was seen with eight half-grown ducklings.

Early on the following morning (June 12) an adult Wilson Snipe *(Capella delicata)* flushed from the grass close to the writer's feet, as he was picking up the trap line. Careful search of an area fifty feet square failed to reveal a nest, though the bird gave every indication of nesting, by its actions when leaving and by the solicitous manner in which it circled about. Also, at the same early hour, eight Mallard Ducks *(Anas platyrhynchos)* rose from the surface of the pond where they had been feeding.

On June 13, camp was established at Sangre de Cristo, on the eastern side of Valle San Rafael near the western base of the Sierra Juarez, and fourteen days were spent here in spite of severe desert heat. A springy area of about four acres exists in the bottom of a wide arroyo nearby, and there is a heavy stand of sedge grass and tules as a result of the water. From the midst of this growth, about 8:30 on the evening of June 16, while refreshing himself in a large, cool pool after a scorching hot day, the writer heard the familiar call of a Farallon Rail *(Creciscus jamaicensis coturniculus)*. The bird kept up the song without intermission during the fifteen or twenty minutes spent at the pool. It was again heard on June 23 and 24. A sharp watch was kept and several lines of mouse traps were set through the marsh in an attempt to secure one of the rails, but no specimens were seen or captured. On the evening of June 23 the writer flushed three Wilson Snipe from a boggy spot in this marsh. About the jojoba bushes *(Simmondsia californica)* numbers of Desert Black-throated Sparrows *(Amphispiza bilineata deserticola)* were breeding, and specimens were secured.

The period from June 27 to July 20 was spent in Valle de la Trinidad, where two camps were made—the first in the mesquites *(Prosopis glandulosa)* near the western end of the "valle", and the second about three and a half miles farther east, near a spring on the northern side. This latter camp was amid true desert vegetation, the creosote bush *(Covillea glutinosa)* and catclaw mesquite *(Acacia greggii)* being the predominant shrubs.

Early on the morning of June 30, when all hands were at work preparing mammal specimens, the sharp cluck, cluck of a California Yellow-billed Cuckoo *(Coccyzus americanus occidentalis)* was heard nearby. Guns were instantly loaded and two of the three members of the party went in pursuit. The bird remained silent for a short time and then flushed near the writer, but in such a way that shooting was impossible, although a clear view of the fleeing bird was had. Again, on the evening of July 6, a cuckoo was seen, but out of range. A heavy rain had fallen during the afternoon and the bird was drying itself on the uppermost branches of a mesquite.

On the afternoon of July 1, a walk of exploration was made along the creek which flows through a narrow rocky gorge westward from Valle de la Trinidad. At places, in the western part of the valley, deep barrancas have been cut by the creek and here many Rough-winged Swallows *(Stelgidopteryx serripennis)* were nesting, the soft bank being in places well perforated with their holes. Along the rushing creek a lone Western Sandpiper *(Ereunetes mauri)* was collected. Upon dissection this bird

proved to be a female that had bred and was now returning from her northern breeding grounds.

It might be mentioned that, at the first Valle de la Trinidad camp, Western Mockingbirds *(Mimus polyglottos leucopterus)* were exceedingly abundant among the mesquites. No less than twenty pairs were breeding in an area not exceeding six acres. At the time of our visit, the young were just leaving their nests and were much sought by the Indians for cage birds.

While at the second camp, during the early part of the afternoon of July 14, the writer was attending to his traps, which were set for Round-tailed Ground Squirrels, when a shadow passed close by. Glancing up, he saw an adult Zone-tailed Hawk *(Buteo abbreviatus)* not over fifty feet above his head, so close that the bluish bill was plainly visible—and he was gunless! A sharp watch was kept thereafter, but the hawk did not return until July 18, when it was seen again, about mid-day, flying high overhead. This mid-day appearance of the hawk might be attributed to the fact that the Round-tailed Ground Squirrels, which were no doubt the attraction for the bird, were most active during the hottest hours of the day. Scott Orioles *(Icterus parisorum)* were occasionally seen at this camp and an immature specimen was collected July 16.

The time from July 20 to July 25, 1927, was spent at Laguna Hanson. The writer had previously visited this locality during the summer of 1925 and had noted several species of water birds breeding in the tule patches—American Eared Grebes *(Colymbus nigricollis californicus)*, Mallard Ducks, Ruddy Ducks *(Erismatura jamaicensis)*, Virginia Rails *(Rallus virginianus)*, and American Coots *(Fulica americana)*. A return trip had been made to the same locality during October, 1926, when the lake was found to be completely dry. According to the custodian of a gun club who resides at the lake, there had been no breeding water birds at Laguna Hanson that summer. Heavy winter rains had again filled this shallow basin, and a check was made in 1927 to determine how quickly the breeding birds would return. Of the five kinds previously noted but two had returned, the Eared Grebes and the Coots. Both were again present in about the same numbers as in 1925, in spite of a presumable absence of one season.

In the coniferous forest near the lake, two adult Mexican Crossbills *(Loxia curvirostra stricklandi)* were taken. Both were males and dissection proved they were breeding. California Linnets *(Carpodacus mexicanus frontalis)* were fairly abundant, and birds with the natal down clinging to the newly acquired plumage were collected, as were two specimens of Lawrence Goldfinch *(Spinus lawrencei)* in the same condition. Both these species were thus established as breeding birds in the pine belt of the Sierra Juarez.—LAURENCE M. HUEY, *San Diego, California, August 29, 1927.*

Western Mockingbird Nesting in a Mail Box.—On May 14, 1927, during a hike with the Boy Scouts of Troop 41, San Diego, California, the attention of the writer was attracted by a "cheeping" sound, as of young birds, issuing from an R. F. D. mail box at the roadside. Investigation led to the discovery of a nest, in the box, of the Western Mockingbird *(Mimus polyglottos leucopterus)*, containing four young birds. A slight opening at the corner of the box permitted the entrance of the parent birds. As the books available to me state, without exception, that the mockingbird nests in such situations as bushes, thickets, vines, thorny trees, etc., the mail box site would seem sufficiently unusual to be worthy of record. There were three mail boxes beside one another on the shelf, the central one being that occupied by the birds.—JACK C. VON BLOEKER, *San Diego Society of Natural History, San Diego, California, July 20, 1927.*

Condor Caught in San Joaquin Valley.—One evening in September, 1926, when returning to Grapevine from our work of surveying for the 220,000 volt transmission line of the Southern California Edison Company through Tejon Canyon, we saw a Condor on the ground, where it had been feeding on a dead cow. Knowing that these birds sometimes gorge themselves until they cannot rise from the ground and that

in this condition they are sometimes to be caught with a rope, I sent one of the men in our car to Grapevine, about five miles away, for a rope, while the rest of the party stayed to watch the Condor.

When he returned, I took the rope, stood on the running board while the car was driven near the Condor, and tried to lasso it, but I found that I could not throw a rope from the running board of the car as I had been able to from the back of a horse.

But we were determined to have that Condor, so two of us stood on the running board, and as the car passed rapidly by the Condor, we jumped off and grabbed it with our hands. It disgorged some of its food and then tried viciously to get to us with its beak, but by each holding one wing, as shown in the accompanying photograph, we were able to avoid any injuries.

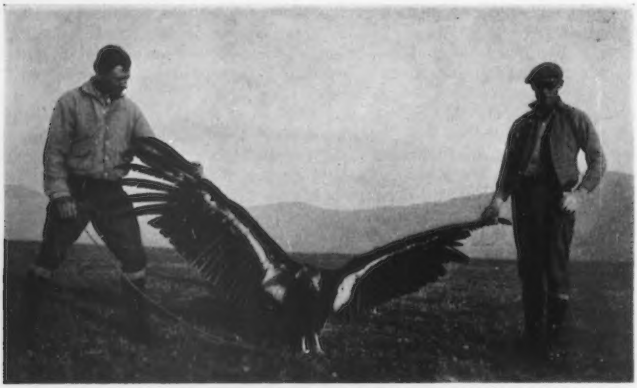

Fig. 62. California Condor in San Joaquin Valley; September, 1926.

After photographing the bird and taking a good look at it, its bright yellow head being one of its most conspicuous features at close range, we released it. Even though it had disgorged some of its food, it still could not fly, so we left it there. The next morning, as we went back to work, it was gone.

This location is in the southern end of the San Joaquin Valley in the comparatively level ground three or four miles out from the foot of the mountains and about two miles east of the Los Angeles highway running south from Bakersfield.—A. V. Wilson, *4176 Garden Avenue, Los Angeles, California, November 30, 1927.* [This communication was transmitted by Harold Michener.—Ed.]

White Pelicans Wintering in Northern Utah.—In the late afternoon of December 10, 1927, while at Utah Lake securing data for the national waterfowl census report, I was somewhat surprised to find two White Pelicans (*Pelecanus erythrorhynchos*) and one Great Blue Heron (*Ardea herodias treganzai*) at the mouth of Provo River. The lake was all frozen over except at the mouth of the river and was covered with about two inches of snow. The thermometer registered near zero. Both species of birds seemed cold and inactive and stood in the shallow water slightly humped over as if in an effort to keep out the cold. During the hour I watched them they made no effort to secure food. Finally the pelicans flew northward to a spring of somewhat higher temperature. The heron, however, remained at the mouth of the river.

Local fishermen report seeing one lone White Pelican at a warm spring on the south shore of Utah Lake in January of 1927.—Clarence Cottam, *Dept. Zoology, Brigham Young University, Provo, Utah, January 10, 1928.*

Western Winter Wren Found Breeding in Tulare County, California.—On July 6, 1926, while collecting mammals and birds near Doyle's Camp in the Sierra Nevada

above Porterville, Tulare County, California, at about 5000 feet elevation, I heard the song of the Western Winter Wren (*Nannus hiemalis pacificus*) and stopped to investigate. A slight movement on the ground near a fallen pine log attracted my attention, and what I at first took to be a mouse proved to be a female Winter Wren. She was soon joined by the male which began fluttering his wings and strutting about her, all the while keeping up a continual song. These antics suggested the possibility of a nest in the vicinity, but a diligent search failed to reveal its whereabouts, and the pair of birds was taken. They are numbers 435 and 436 in my collection. Upon sexing the birds after skinning, the female was found to contain a fully-developed egg.

Two pairs of Western Winter Wrens were afterwards seen on the same creek, the nearly completed nest of one pair being found. So far as I am able to ascertain, this is the most southerly breeding record in California, of this species, the Yosemite Valley being the most southerly previously recorded breeding limit.—J. STUART ROWLEY, *Alhambra, California, November 16, 1927.*

Notes on the Dwarf Cowbird in Southern California.—The continual increase of the Dwarf Cowbird (*Molothrus ater obscurus*) in the San Bernardino Valley of southern California since I first reported them here (CONDOR, XX, 1918, p. 211) has caused me considerable alarm. At that time I reported about four species that had been parasitized, but now I must report a total of twelve.

The results of a recent survey of an even hundred nests of victims of the Cowbird have been tabulated as follows:

The species	The percentage of the parasitized nests examined	The number of Dwarf Cowbird eggs per nest	The percentage of nests of a given species having but a single Dwarf Cowbird egg	Average weight of Dwarf Cowbird eggs in grams	Maximum weight of Dwarf Cowbird egg in grams	Minimum weight of Dwarf Cowbird egg in grams
Empidonax trailli trailli Traill Flycatcher	32	1 to 3	74	2.35	2.91	1.84
Astragalinus tristis salicamans Willow Goldfinch	8	1 or 2	75	2.08	2.34	1.65
Melospiza melodia cooperi San Diego Song Sparrow	4	1 or 2	75	2.21	2.49	1.89
Pipilo maculatus megalonyx San Diego Towhee	1	1	100	2.09	.....	.....
Guiraca caerulea salicarius California Blue Grosbeak	1	1	100	2.14	.....	.....
Passerina amoena Lazuli Bunting	3	1 or 2	75	2.42	.....	.....
Vireo huttoni huttoni Hutton Vireo	1	2	.....	2.27	.....	.....
Vireo bellii pusillus California Least Vireo	25	1 to 4	52	2.32	2.59	1.89
Dendroica aestiva brewsteri California Yellow Warbler	16	1 to 3	56	2.26	2.64	1.53
Icteria virens longicauda Long-tailed Chat	5	1 or 2	80	2.40	2.75	2.20
Wilsonia pusilla chryseola Golden Pileolated Warbler	1	2	.....	2.40	.....	.....
Polioptila caerulea obscura Western Gnatcatcher	2	1	100	2.01	.....	.....
Polioptila plumbea Plumbeous Gnatcatcher	1	1	100	1.97	.....	.....

The weights of the eggs were determined to see if the Cowbird eggs in the nests of larger species were larger than in the nests of the smaller species. The number of tests made were not sufficient to prove any rule of this kind, but the following interesting points can be mentioned.

All eggs from nests of Long-tailed Chat, about the largest of the parasitized species, were larger than the average. The eggs from nests of the smaller species such as Willow Goldfinch, Western Gnatcatcher, and Plumbeous Gnatcatcher were unquestionably much smaller than the average. There is, however, a considerable number of exceptions to the suggested rule.

The Traill Flycatcher, California Least Vireo, and California Yellow Warbler suffer even more than this report would indicate. They not only have the most parasitized nests and the most Cowbird eggs per nest, but a large number of nests of these species were absolutely destroyed by the Cowbirds (at least I blame the destruction to them), and such nests were not considered in making the survey.

The parasitized nest of Plumbeous Gnatcatcher was taken in the Coachella Valley west of Mecca. This is the first Dwarf Cowbird egg that I have found in that district, although there is a record of the birds having been taken at Mecca a few miles east. I have not discovered any Cowbird eggs in the seventy miles between Redlands and Thermal and it will be of interest to see how long it requires for them to spread to this territory.—WILSON C. HANNA, *Colton, California, November 24, 1927.*

A Third California Record of the Rusty Blackbird.—During a recent stay on Santa Rosa Island, California, Mr. Paul E. Trapier found a specimen of Rusty Blackbird (*Euphagus carolinus*) dead in the barn at the Vail Company's ranch headquarters. The specimen was a female and was found on November 6, 1927. It is now in the Dickey collection.

I am aware of no California record of this bird since the publication of Grinnell's Distributional List of the Birds of California (Pacific Coast Avifauna No. 11, 1915), in which Dr. Grinnell cites the two occurrences which had come to his attention at that time. The lack of records during the intervening years confirms the opinion that this bird is only the rarest of winter visitors to the State. It is interesting to note that two of the three captures of this species in California have been made on one or another of the Channel Islands.—DONALD R. DICKEY, *California Institute of Technology, Pasadena, California, November 26, 1297.*

Bird Notes from San Diego County.—The following items from the southern end of the State add to or amplify information hitherto published relative to a few California birds.

American Pintail Duck *(Dafila acuta tzitzihoa).* Ornithological literature does not record the nesting of the American Pintail farther south than Los Angeles and Riverside counties. A casual remark by E. H. Glidden, San Diego County game warden, referring to the young "sprigs" that had been raised on Lake Henshaw was therefore of considerable interest to me. At Glidden's suggestion I wrote to J. Kitchin, resort manager at this lake, and, under date of August 28, 1927, he replied: "It is certainly my pleasure to confirm Mr. Glidden's statement about sprig ducks hatching here on Lake Henshaw. I have had years of experience with sprig or Pintail Ducks and certainly know the difference between them and others. Last year, 1926, there were many hundred sprig hatched and raised on the lake and I caught some twenty babies and raised them to grown birds, when Glidden compelled me to turn them loose. This year I do not believe there were more than forty nests of sprig all told, but what few there were all hatched out, as I saw many mothers with eight or ten little fellows each around the lake." Lake Henshaw, at an elevation of 2720 feet, is the latest of the reservoirs to be created in San Diego County, and, when full, will be the largest. The dam was completed for the first impounding of water early in 1923, and it evidently did not take the pintails long to discover that this spot was particularly suited to their needs. They are not known to nest on any of the other eight large reservoirs in San Diego County.

Cooper Hawk (*Accipiter cooperii*). Major Brooks' note in the CONDOR, XXIX, 1927, p. 245) on the breeding of immature hawks was read with interest at a time when such a situation had come under our observation for the first time. On June 26, 1927, there was brought to the Natural History Museum in San Diego a family of Cooper Hawks, consisting of a male in adult plumage, a female in immature plumage and two live young. They had been secured that day by Archie Flint, Jr., at Poway, San Diego County. In answer to a letter from us seeking confirmation that the female unquestionably belonged to the "family", Mr. Flint wrote: "On June 25 my father informed me of the nest and the following day I took my shot gun and watched the nest until the old bird arrived and I shot it. It was the female. In about two hours the other hawk came to feed the youngsters and I shot him. Both male and female were shot on the side of the nest feeding the young."

Sabine Gull (*Xema sabini*). My note in the CONDOR (XXIX, 1927, p. 73) listed the only records of the Sabine Gull off San Diego County, which were for the years 1905, 1925 and 1926. The year 1927 can now be added, for on September 18, 1927, J. W. Sefton, Jr., shot an immature female off Point Loma, which is now in the collection of the San Diego Society of Natural History. He said there were about twenty-five of the birds all together, but as he believed they were Bonaparte Gulls he collected only one. A week later he was again on the ocean, but no Sabine Gulls could be seen.

Northern Phalarope (*Lobipes lobatus*). On the same day (September 18, 1927), Mr. Sefton observed a habit of phalaropes that seems of interest. He said that a slight breeze caused ripples on the ocean, but that there were "dead spots" where the water was smooth and oily-looking. These areas, caused perhaps by passing fish boats or by some peculiarity of the wind, were in ribbons from ten to a hundred feet wide and from a hundred to a thousand yards long. In these dead spots, and only there, phalaropes were congregated in countless thousands. He said that the effect was that of "rivers of phalaropes" on the surface of the ocean. As usual, the birds were fearless and allowed him to run his motor-boat within a few feet of them. When they took wing, they would fly from one dead spot to another. Mr. Sefton stated that both Northern and Red phalaropes were intermixed, but the one specimen that he collected was one of the former species.

Desert Quail (*Lophortyx gambelii gambelii*). One would expect this quail to occur in suitable areas of eastern San Diego County, but it is a fact that there appear to be no definite records of its capture within the County limits, and the bird is not included in Frank Stephens' "An Annotated List of the Birds of San Diego County, California" (Transactions, San Diego Society of Natural History, vol. 3, no. 2, 1919). I recently was in Borego Valley during the open season for quail and learned from residents that the Desert Quail is common there. At my request, Fritz H. Meyers shot a pair, which are now in the collection of the San Diego Society of Natural History. They were taken on December 5, 1927, near his home in Borego Valley, which is inside San Diego County by a margin of 12 to 14 miles from both the north and east boundaries.

Lewis Woodpecker (*Asyndesmus lewisi*). This wookpecker, usually associated with timbered sections, is known to wander after the breeding season, but one would hardly expect to find it directly on the ocean front. My surprise was therefore great when, on September 24, 1927, I saw one of these birds in the built-up section of La Jolla, City of San Diego. It was flying from yard to yard in front of some houses facing the ocean, and seemed rather disconsolate as I watched it for some time.

California Black-chinned Sparrow (*Spizella atrogularis cana*). Alaska Pileolated Warbler (*Wilsonia pusilla pileolata*). On December 21, 1927, while making a San Diego "Christmas Bird Census" for the magazine Bird-Lore, Laurence M. Huey and I encountered two unexpected winter visitants. The Alaska Pileolated Warbler was in a bougainvillea vine close to the Natural History Museum, Balboa Park, and was uttering a single, rather loud call note. The bird, an adult female, was obtained and is now in the collection of the San Diego Society of Natural History. The California Black-chinned Sparrow was on a shrubby hillside near Lincoln Acres on the outskirts of San Diego. It was an adult male in bright plumage and was observed through binoculars by both Mr. Huey and myself for some time.—CLINTON G. ABBOTT, *San Diego Society of Natural History, San Diego, California, December 24, 1927.*

Fourth Known Occurrence of the Harris Sparrow in California.—For some time I have been banding birds in my yard, which is located in the Kensington Park district of Berkeley. On November 21, 1927, at 10:30 a. m., my wife took a bird out of the trap, that I was unable to identify. It was associated with a flock of Golden-crowned Sparrows.

Upon taking the bird to the Museum of Vertebrate Zoology, it was identified by Dr. Joseph Grinnell and others there as an immature specimen of a Harris Sparrow (*Zonotrichia querula*). I then put band number 611057 on it and liberated it near where it was captured. It has not been seen since.

This species is a rare straggler in California, having been recorded only twice by specimens, and once by a sight record. The first specimen, an adult male, was

seen by W. O. Emerson, at Haywards, California, with a flock of Golden-crowned Sparrows on October 27, 1900, and was taken by him the next day (CONDOR, II, November, 1900, p. 145). This specimen is now in the Museum of the California Academy of Sciences in San Francisco.

The second specimen was taken by C. B. Linton at Smuggler's Cove on San Clemente Island, October 15, 1907 (CONDOR, X, March, 1908, p. 84). This specimen was no. 16656 in the Thayer Collection, but is now no. 21272 in the Museum of Vertebrate Zoology, Berkeley.

The third record is a sight record made near the home of Mrs. A. S. Allen in Berkeley (CONDOR, XVII, March, 1915, p. 80). This bird was seen repeatedly by a number of reliable observers between December 25, 1912, and February 11, 1913.—ERNEST D. CLABAUGH, *Berkeley, California, January 8, 1928.*

Fifth Record of Harris Sparrow in California.—During December of each year I operate a bird banding station at Encinitas, San Diego County, California. My traps are located in a small dry canyon about a quarter of a mile from the ocean and thirty miles north of San Diego.

On December 21, 1927, about 2 p. m., I caught a bird which was unknown to me and could not be identified from the books then available. It was associated with the members of a large flock of Golden-crowned and Gambel sparrows. I kept it in a cage until my return to Berkeley, and on January 14, 1928, I took it to the Museum of Vertebrate Zoology, where it was definitely identified by Dr. Joseph Grinnell as a first-year individual of a Harris Sparrow (*Zonotrichia querula*).

This is the fifth record of this species in California. Its band number is 569150, and it is at present a contented inmate of my aviary here in Berkeley.—HAROLD H. COZENS, *1631 Posen Avenue, Berkeley, California, January 18, 1928.*

The Flammulated Screech Owl in Oregon.—On May 25, 1927, an adult female of this little owl, *Asio flammeolus*, was collected by the writer at an altitude of about 7,000 feet on Hart Mountain in eastern Lake County, Oregon. When first seen, in mid-day, it was perched on a lower limb of a small quaking aspen, not over five feet from the ground, in a thicket of these trees growing on a steep slope of the mountain.

On careful examination, the condition of the ovaries would indicate that this was not a breeding bird. The entire stomach and its contents were preserved and examined by Remington Kellogg, of the U. S. Biological Survey, who reports the food found in it as follows:

Ground beetles, 34 per cent, including *Carabus taeniatus oregonensis*, 2, *Harpalus* sp., 1, *Pterostichus vicinus*, 1, *Pterostichus* sp., 1, *Amara* sp., 1; darkling beetles (small undetermined Tenebrionidae, 1), a trace; carpenter ant, *Camponotus herculeanus whimperi*, 1, a trace; camel crickets, *Ceuthophilus* sp., 2, 2 per cent; caterpillars, 3, 2 per cent; jumping spiders, Attidae, 3, 2 per cent; remains of at least 26 moths, 60 per cent.

This is the first known occurrence of this owl in Oregon.—STANLEY G. JEWETT, *Portland, Oregon, November 3, 1927.*

Notes on Variations in the White-fronted Goose.—At the time Messrs. Swarth and Bryant wrote their article, "A Study of the Races of the White-fronted Goose (*Anser albifrons*) Occurring in California" (Univ. Calif. Publ. Zool., vol. 17, 1917, no. 11), there were no breeding birds available for comparison, and their article was based almost entirely upon specimens from California. Briefly, for those who do not have access to that paper, the authors have concluded that "two well-defined subspecies of *Anser albifrons* occur in California during the winter months, instead of the single race heretofore recognized." The large rare form, Tule Goose, is considered as *Anser albifrons gambeli*, while the small bird, common throughout the United States, is given as identical with the European form. In addition to size, the two races are supposed to differ in color of plumage, in color of eye-ring, and in the number of tail feathers. The naked skin of the eye-lid of *albifrons* is described as grayish brown, while that of *gambeli* is given as yellow or orange. Females of both races, and the male *albifrons*, are described as having sixteen rectrices, while the male of the larger form is supposed to have eighteen.

During the fall of 1921 and spring of 1922, when R. W. Hendee and I worked on the Arctic coast of northwestern Alaska for the Colorado Museum of Natural History, Hendee obtained a small series of White-fronted Geese at Wainwright. Subsequently, Charles Brower added to this collection, and there are now ten breeding specimens in the series at the Colorado Museum of Natural History, and five in the Milwaukee Public Museum. In my list of the birds of the northwest coast (CONDOR, XXVII, 1925, p. 202), I called our specimens *Anser albifrons gambeli*, but accepting Swarth and Bryant's decision all these breeding birds must be considered as the small form, *Anser albifrons albifrons*.

The specimens in the Colorado Museum of Natural History and in the Milwaukee Public Museum were taken near Wainwright and Barrow, Alaska, and three collected by Mr. H. B. Conover, now in the Field Museum, from the vicinity of Igiak Bay, near the mouth of the Yukon River. All of these birds fall within the general measurements of the smaller race. Two, however, have seventeen rectrices (C.M.N.H. no. 8658 and M.P.M. no. 13970), or normally eighteen, which is given as one of the characters of the male Tule Goose. One bird is a male and the other a female, so it would seem that the number of tail feathers can not be depended on as diagnostic of the larger bird. Mr. Conover has noted that one of his birds (no. 3572) had a yellow eye-ring, while the measurements show it to be of the small form.

Shortly after Messrs. Swarth and Bryant's paper was published, Mr. Stanley C. Arthur, of the Department of Conservation of Louisiana, and I had occasion to handle many specimens of White-fronted Geese. We visited several hunting camps, and measured the birds of the hunters, hoping that we might find some as large as the Tule Goose. Although we measured more than forty birds, none approached the large size of the California birds. But we did note that there was no uniformity in the color of the eye-ring. Some were yellow, as has been given as a character of *gambeli*, some were dark, and others were a rather light brown. There was no uniformity whatever; fairly large birds were apt to have the eye-ring brownish, while in smaller birds they were yellowish. Of twenty birds shot on Cameron Farm, Cameron Parish, Louisiana, in December, 1918, ten had yellowish eye-rings, several had a trace of yellow, and the others were brownish. All birds fell within the measurements given for *Anser albifrons albifrons*.

The breeding grounds of *albifrons* extend from the mouth of the Yukon River to Point Barrow, as is shown by our specimens. Swarth and Bryant suggest the possibility that the breeding ground of *gambeli* "is restricted to points farther eastward in Arctic America than the region inhabited by *Anser albifrons albifrons*." Mr. A. C. Bent (U. S. Nat. Mus. Bull. 130, 1925, p. 198) gives the breeding range of the latter form as circumpolar, with the only gap in the district lying between the Mackenzie River and Greenland, and he suggests that this may prove to be the breeding range of *gambeli*. Mr. Bent has handled specimens from scattered localities from the Mississippi Valley to the Atlantic States "that measured up well within the measurements of the Tule Goose." Of seventeen specimens in the Museum of the University of Iowa, from Iowa and Nebraska, all are of the small form.

To sum up the above, the color of the eye-ring in the White-fronted Goose can not be considered in determining the subspecies to which a specimen belongs. While it is probable that the majority of the male geese have eighteen rectrices, this is not constant, for we find both a male and a female of the smaller form with seventeen (normally eighteen) rectrices. So it would seem that the differences between the two forms of *Anser albifrons* are of color and size.—ALFRED M. BAILEY, *Chicago Academy of Sciences, January 1, 1928.*

EDITORIAL NOTES AND NEWS

The third annual meeting of the Cooper Ornithological Club will be held in San Diego from Friday to Sunday, May 4, 5 and 6, under the auspices of the San Diego Society of Natural History. Headquarters of the meeting will be at the Society's Museum in Balboa Park. The local committee of arrangements, through its chairman, Clinton G. Abbott, urges all Cooper Club members to make immediate note of the dates and to attend the meeting if it is any way possible. A representation from the east is assured. The program of papers, both technical and popular, will be supplemented by an exhibition of original bird paintings and drawings by Allan Brooks. The San Diego Society of Natural History, which has been in existence since 1874, promises to have some of its treasures on display, including three specimens of the extinct Guadalupe Caracara. The San Diego region provides a wide choice of field-trip possibilities, both by land and water, and this feature of the meeting will be well taken care of. The bird-loving public, whether Club members or not, will be welcome to attend all these events.

Certain of our non-collecting friends are accustomed to casting aspersions upon the ethical code of the average collector, especially that of the collector of birds' eggs. We, personally, do not believe that the egg collector is any more prone to disregard ethical proprieties than the collector in any other natural history field. Now comes an experiment to the point. Miss Emily Smith, in her noteworthy article in the current issue of THE CONDOR, discloses the location, even to the exact nesting niches, of a "colony" of the rare Black Swift. These sites are readily accessible, and in a locality quickly reachable from a metropolis of collectors. Let us now see if Miss Smith's appeal against disturbance of the Swifts the coming nesting season be heeded. Obviously, only CONDOR readers will be in possession of the facts. We egg-collectors are on trial.—J. G.

It is gratifying, as we have remarked before, to note the increasing spread of book collecting as a recreation or hobby. There are probably ten ornithological libraries of fair size now to the one of twenty years ago. However, the mere collector, who prizes first editions and rare bindings above all else, hasn't so much of our sympathy as the striving naturalist who wishes to have at arm's length a well-selected set of books for reference. Chief of these books will be bound volumes of periodicals; for among the articles published in our periodical literature are to be found the chief original and authoritative sources of current ornithological thought. Now the book-collector's notion is that only a *complete* set of a given periodical is of real value. Indeed, we have heard such an one declare that he would rather have no part of a given set until such time as he can obtain the entire set, including the usually exceedingly rare and costly early volumes. What we wish to emphasize here is that, from the standpoint of immediately useful ornithological knowledge, the later volumes in any series are worth far more than the earlier volumes in the same series. For example, there is no question that the later volumes of THE CONDOR and *The Auk* are vastly the more informative. In other words, for the serious student of birds, the incomplete set comprising the later volumes, the ones easiest to acquire, are of themselves eminently worth while possessing, *and reading*.—J. G.

MINUTES OF COOPER CLUB MEETINGS

NORTHERN DIVISION

NOVEMBER.—The Northern Division of the Cooper Ornithological Club held its November meeting in Room 101 Zoology Building, University of California, Berkeley, on November 22, 1927, at 8:00 p. m. Vice-president Mailliard occupied the chair and about sixty members were present. Minutes of the Northern Division for October were read and approved. Minutes of the Southern Division were read. The name of Mr. B. D. Dexter, 2519 Ashby Avenue, Berkeley, was proposed for membership by Mr. E. D. Clabaugh.

Mrs. Kibbe reported that on November 11, at Seabright, she had watched three Herring Gulls performing the seemingly impossible feat of swallowing starfish four inches in diameter. Mr. Mailliard reported the continued presence of the al-

bino Ruddy Duck at Spreckel's Lake. Mr. Clabaugh announced the banding of an immature Harris Sparrow, the identification having been verified at the Museum of Vertebrate Zoology by the comparison of the living bird with specimens in similar plumage.

The topic of the evening's discussion was "Bird-life in Nevada". The speakers were Adrey E. Borell, Jean M. Linsdale and E. Raymond Hall. Mr. Borell told of a six weeks field trip in the Ruby Mountains of Nevada in company of Mr. Ralph Ellis, Jr., and Mr. Raleigh Borell. Mr. Borell's talk concerned chiefly the birds of Ruby Lake, a shallow body of water 25 miles long, with islands and tule patches furnishing safe retreats for many kinds of water birds. From this camp sage flats, brushy canyons and rocky cliffs were accessible, giving the campers opportunity to study 105 species of birds of widely differing habitat preference.

Mr. Linsdale reported upon the birds of Fish Lake Valley, on the western edge of Nevada, where camps were established successively at three stations varying in elevation from 4900 feet to 7000 feet and where birds were seen from a desert environment up to high mountain conditions at 8200 feet. A total of 85 species was studied with especial reference to the ecologic conditions governing their distribution.

Mr. Hall spoke upon the birds of Pyramid Lake, where the largest colony of White Pelicans known in North America breeds. Other birds discussed by Mr. Hall were Cormorants, Canada Geese, American Mergansers, Coots, and California Gulls. A question which Mr. Hall left with his hearers was: "Why does a flying line of Pelicans appear every now and then to go over invisible hurdles in the air?"

After the meeting many members of the Club expressed to the speakers their appreciation of the opportunity which had been given them to learn in a single evening so much about the distribution of bird-life in Nevada. Adjourned.—HILDA W. GRINNELL, *Secretary.*

DECEMBER.—The Northern Division of the Cooper Ornithological Club held its regular monthly meeting on December 22, 1927, at 8:00 p. m., in Room 101, Zoology Building, University of California, Berkeley. About fifty members were present. Vice-president Mailliard occupied the chair. Minutes of the Northern Division for November were read and approved; minutes of the Southern Division for November were read.

Applications for membership were as follows: J. P. Strohbeen, 15 Penn Avenue, Santa Cruz, California, and Mr. Melvin D. Wilder, P. O. Box 642, Santa Cruz, California, both proposed by Clark P. Streator. Nominations for officers for 1928 were as follows: President, Mr. Frank N. Bassett, nominated by Mr. Carriger, seconded by Mr. Hall; Vice-president, Mr. Ernest D. Clabaugh, nominated by Mr. Dixon, seconded by Mr. Dexter; Secretary, Mrs. Joseph Grinnell, nominated by Mrs. Allen.

Mr. Mailliard reported the presence of Ruddy Ducks, Canvas-backs, Ring-necks and one White-winged Scoter on lakes in Golden Gate Park. Mrs. Allen announced that Mrs. Blake had seen a Tanager in Berkeley on December 16. Mr. Harwell reported having seen a Valley Quail in Oakland at the County Courthouse. Mr. Cain had found Red-tailed Hawks plentiful and Golden-crowned Kinglets present at the Oakland Scout Camp. Mr. Bassett said that during eighteen years observation in Alameda he had never found the Bullock Oriole nesting until three years ago when a pair discovered the pool which he had constructed in his garden and since then they had nested just across the street. Mr. C. P. Smith reported that on the first Sunday in November while observing birds upon the marshes near Alviso he had come upon an Eastern Marsh Sparrow. The bird was perched upon a fence post and a close view of it through field glasses confirmed the opinion which Mr. Smith and his companion had formed at first glance.

Mr. Harwell read letters to and from Mrs. Bicknell in regard to the nomination of a State Bird. This being the topic of the evening's program the chairman called upon members to present their views. About fifteen responded with suggestions as to first and second choice. It was the sense of the meeting that, since the matter offers an unusual opportunity to interest school children in the study and protection of birds, the Northern Division of the Cooper Club recommend not a single bird but a *list* of birds, to be studied by those interested in a selection. Mr. Clabaugh moved that the Chair appoint a committee to draw up such a list. Mr. Harwell seconded the motion which was unanimously passed. Adjourned.—HILDA W. GRINNELL, *Secretary.*

SOUTHERN DIVISION

NOVEMBER.—The regular meeting of the Cooper Ornithological Club, Southern Di-

vision, was held at the Los Angeles Museum, Exposition Park, Los Angeles, on the evening of November 29, 1927, with President Appleton in the chair. About 40 members and friends were present. The minutes of the October meeting of the Southern Division were read and approved. Minutes of the October meeting of the Northern Division were read.

Dr. Miller moved an amendment to his motion of the October meeting as reported in those minutes, which would make it read, "that the Southern Division extend an invitation to all the members of the Cooper Ornithological Club to meet with it in an annual meeting in southern California next spring". This amendment was seconded and carried unanimously.

Dr. E. W. Nelson, until recently Chief of the Bureau of Biological Survey, was the speaker of the evening. He said he was back at work on the birds and mammals of Mexico, work which was interrupted by the executive duties placed upon him when he became Chief of the Biological Survey. He told of some of the things being done by this Bureau, by Mr. A. H. Howell on the birds of Florida, a work which probably will be completed soon; by Mr. Goldman on the birds of Arizona, for which the field work has been completed, but for which the date of publication cannot now be determined; by Mr. Oberholser on the birds of Texas, a work farther from completion than the other two.

Dr. Nelson also spoke of the depletion of wild fowl, particularly ducks, due partially to alkali poisoning at such places as the Bear River marshes near Salt Lake, Utah, where not only the water fowl, but wrens, blackbirds, and many other birds perish in large numbers, and partially to the destruction of their winter feeding grounds, shooting and other causes. The Biological Survey, with the aid of the sportsmen in the San Francisco Bay region who raised over $7000 for the work, is making a study of the extent of alkali poisoning and of what can be done to better the present condition. In response to a question from Mr. Wyman, Dr. Nelson stated that there was a surprisingly strong flight of ducks reported early this season, both in Utah and in California, but since that time they have been very scarce.

Mr. Wright M. Pierce commented on the scarcity, almost total absence, of ducks this season at Bear Lake and Baldwin Lake, in the San Bernardino Mountains, and that the hunters, not finding ducks, are shooting every kind of bird that flies, many of which he found lying dead on the shores of the lakes. Mr. Wyman reported similar observations at Una Lake, beside the highway just south of Palmdale, California.

Mr. Wyman spoke of the movement to choose a state bird for California and reminded those present that Dr. Grinnell had asked for a postal card vote from all Cooper Club members. After some discussion on the subject, Mr. Willett said that it appeared to him that the first bird to get two votes will be chosen! Adjourned. —HAROLD MICHENER, *Secretary*.

DECEMBER.—The Cooper Ornithological Club, Southern Division, held its regular meeting at the Los Angeles Museum, Exposition Park, Los Angeles, on the evening of December 27, 1927, at 8 p. m., with Mr. Appleton presiding. About 16 members and friends were present. The minutes of the November meeting of the Southern Division were read and approved. The minutes of the November meeting of the Northern Division were read.

The following applications for membership were read: Robert D. Camp, Brownsville, Texas; Harold C. Wilson, Ephraim, Wisconsin; John Kern Strecker, Baylor University, Waco, Texas; Gayle B. Pickwell, State Teachers College, San Jose, California; Charles de Forest Pettit, 225 Bush Street, San Francisco, California: all these by W. Lee Chambers; Edward L. Faufel, 628 S. Broadway, Los Angeles, and Lee Bernard McConville, 1620 Marengo Ave., South Pasadena, California, by R. T. Moore; Joseph Lewis Cobb, 227 Harvard Ave., Claremont, California, by Wright M. Pierce; Mrs. Chas. C. Bell, Saratoga, California, by Geo. W. Lane; J. W. Clise, Jr., 605 Spring St., Seattle, Washington, by Harold Michener.

Mr. Chambers moved that a nominating committee be appointed with instructions to report nominations for officers of the Southern Division at the next meeting. The motion was seconded and carried. The President appointed Dr. Loye H. Miller, Mr. Howard Robertson and Mr. Donald R. Dickey as members of the nominating committee. There being no program prepared for the meeting, the evening was spent in a general discussion of birds, their relative abundance, their appearance, and their notes. Adjourned.—HAROLD MICHENER, *Secretary*.